

HERESBACH

MARKHAM

1614



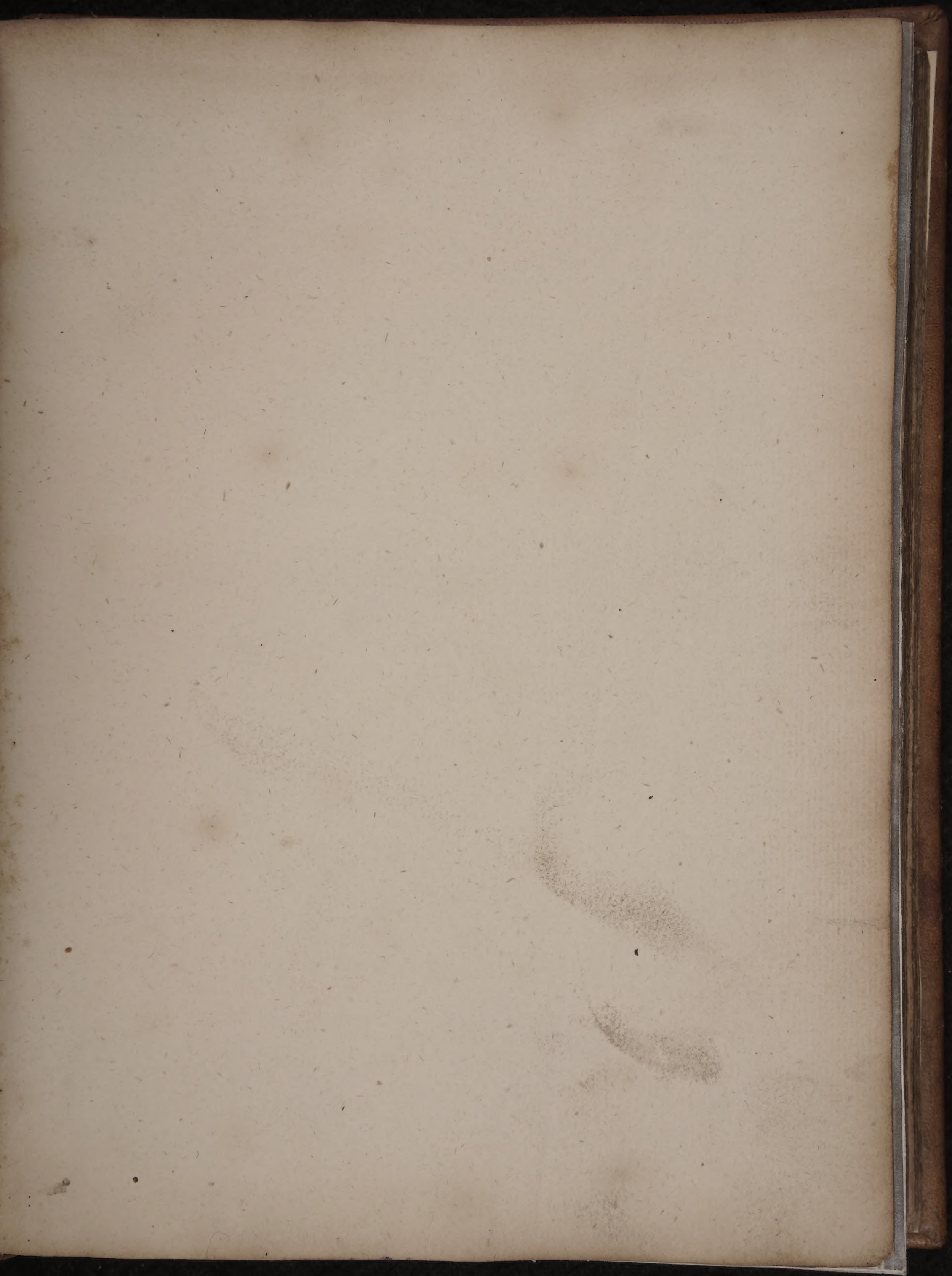


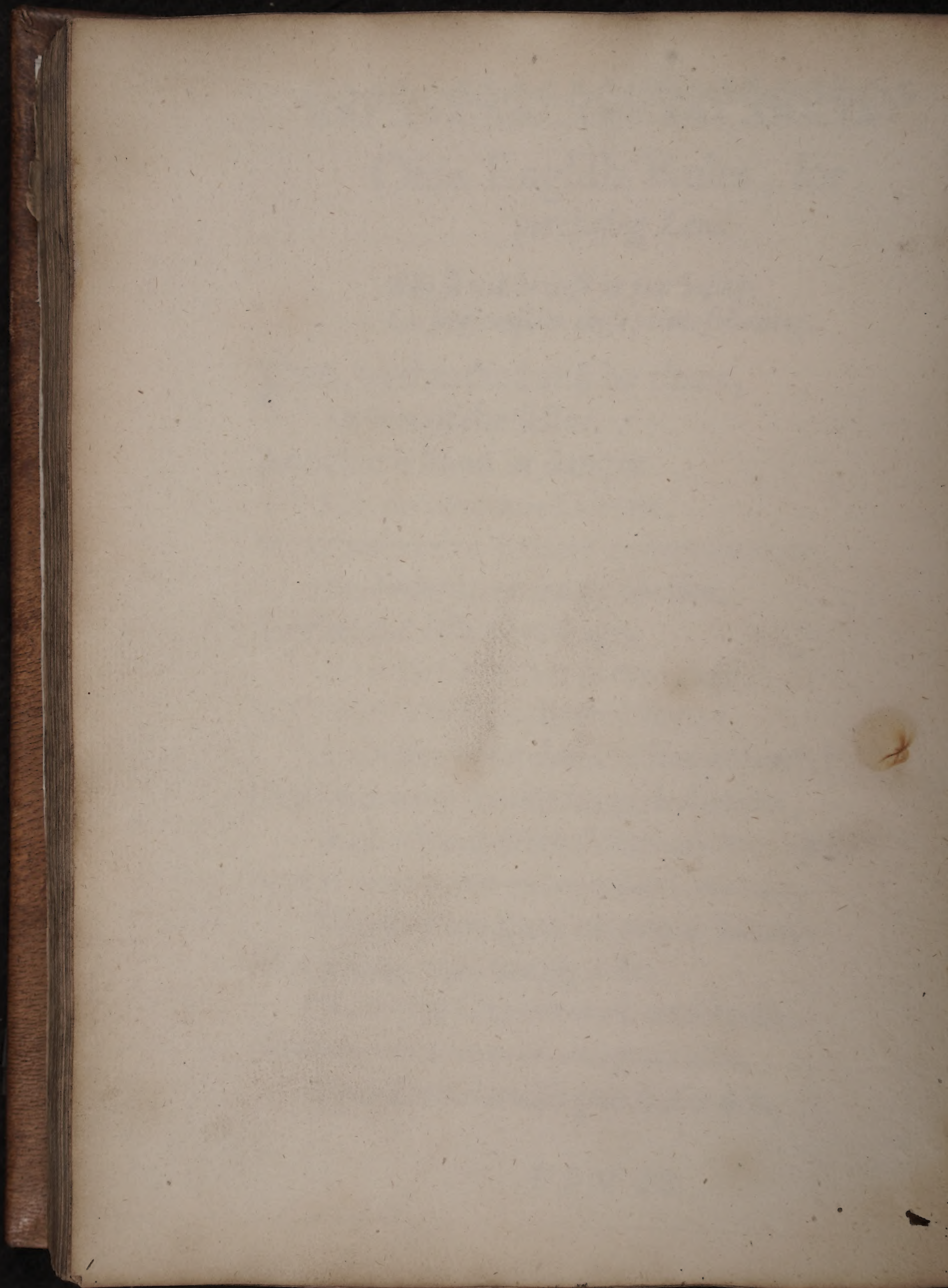


6902

4066

/R





The Second Book of the
English Husbandman
1 of the Kitchen Garden ^{viz}
2 of planting Strange flowers
3 of Ordering all sorts of woods
4 of breeding Cattle
5 The whole art of Fishing
6 The true way of maring

The Giles

The
Second Booke
of the
English Husbandman

Viz:

- 1 of the Kitchen Garden
- 2 of Planting Strang Flow^{rs}
- 3 of Ordering all Sorts of Woods
- 4 of Breeding Cattle.
- 5 The whole Art of Fishing.
- 6 The true way of managing
the Fighting - Cock.

London

Printed by T. S. for John Brown in
St. Dunstons Ch: hard in Fleet-Street.

1614

THE
Second Booke of the
English Husbandman.

CONTAYNING

the Ordering of the Kitchin-Gar-

den, and the Planting of strange Flowers:

the breeding of all manner of CATTELL.

Together with the Cures, the feeding of

Cattell, the Ordering both of Pastures and

Meddow-ground: with the vse both

of high-wood and vnder-wood.

WHEREVNTO IS ADDED

a TREATISE, called *Goodmens Recreation*:

Contayning a Discourse of the generall Art

of Fishing, with the Angle, and otherwise;

and of all the hidden secrets belonging

thereunto.

TOGETHER

VVith the Choyce, Ordering, Breeding, and Dyeting
of the fighting Cocke.

A worke neuer written before by any Author.

By G. M.

LONDON:

Printed by T. S. for Iohn Browne, and are to be sold at his
shop in S. Dunstons Church-yard in Fleetstreet. 1614.



A Table of all the Principal Matters
contained in this Book.

Chap. i

How a Husbandman shall judge & fore-know
all kind of Weather & other seasons of y^e year

Of Rain

Signes from Clouds

Signes from y^e Moon

Signes from y^e Sun

Signes from Lightning

Signes from fowl

Signes from beasts

Signes from things?

(wth out Motion)

Signes of much Rain

Signes of Snow or Hail

Signes of Wind

Signes of Tempest

Signes of fair Weather

Signes of Winter

Signes of y^e Spring

Signes of a hot Summer

Signes of a long Winter

of a forward or backward year

of a good or bad year

Signes from Xmas day

from y^e Sun Rising

from y^e Twelfth day

from S^t Pauls day

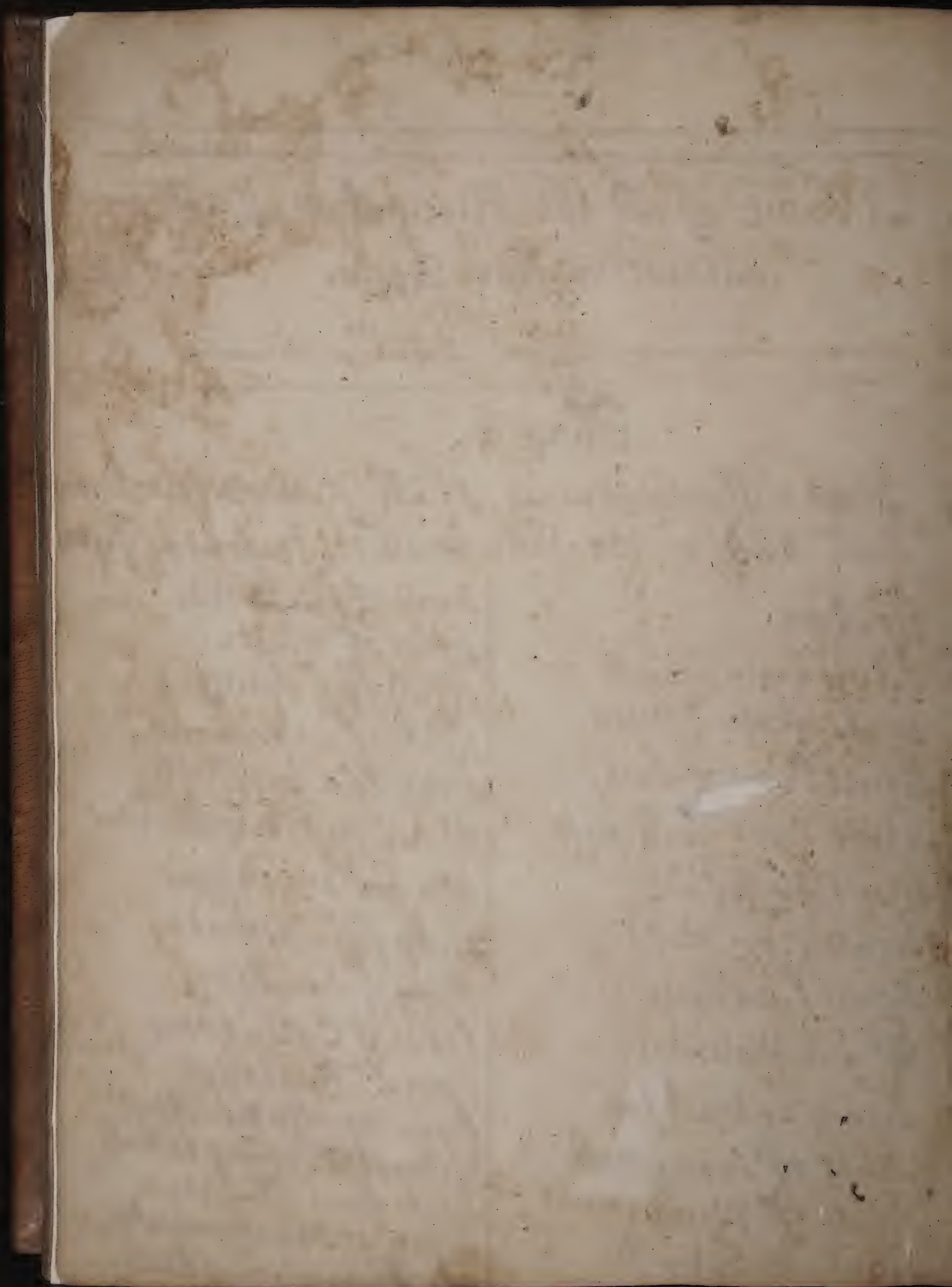
from Mandlin & Swithens

if (an) shall be (a)rap or (a)w

Signes from Thunder

Signes of sickness or health

of the Duration of health





A Table of all the principall matters contayned in this Booke.

CHAP. I.

How the Husbandman shall iudge and fore-know all kinde
of weather, and other seasons of the yeere.



*O*f Raine.

Signes from clouds.

Signes from the
Moone.

Signes from the Sun.

Signes from Lightning.

Signes from Fowle.

Signes from Beasts.

Signes from things without Mo-
tion.

Signes of much Raine.

Signes of Snow or Hayle.

Signes of Winde.

Signes of Tempests.

Signes of faire weather.

Signes of Winter.

Signes of the Spring.

Signes of a hot summer.

Signes of a long winter.

Signes of a forward or backward
yeere.

Signes of a good or bad yeere.

Signes from Christmas day.

Signes from the sunne rising.

Signes from the twelue dayes in
Christmas.

Signes from S. Paules day.

Signes from Maudlin and S. Swit-
thens day, if Corne shall be cheap
or deere.

Signes from Thunder.

Signes of sicknesse or health.

The preservation of health.

The Table.

CHAP. II.

The choyse of Grounds for the Kitchin-Garden, and the ordering thereof.

The Contents.

T He choyce of Ground.	Ordering of Garden-beds.
The bettering of Grounds.	Of the fruitfull soyle.
The trenching of Grounds.	The necessariest ornament in a
Of breaking the Garden-mould.	Garden.

CHAP. III.

Of the Sowing and Ordering of all manner of Pot-Hearbes.

The Contents.

O F all sorts of Pot-herbs.	Of Basill.
Of Endive and Succory.	Of sweet Marioram and Mari-
Of Beets.	golds.
Of Land-Cresses.	Of Stramburies.
Of Parcely.	Of Borrage and Buglosse.
Of Sauory.	Of Rosemary.
Of Time.	Of Pennyroyall.
Of French Mallomes, and Chervil.	Of Leekes.
Of Dill.	Of Onyons.
Of Issop.	Of gathering Onyon-seeds, or the
Of Mints.	Onyon.
Of Violets.	

CHAP. IIII.

Of sowing of certaine Hearbes which are to be eaten, but especially are medicinall, yet cuer in the Husbandmans Garden.

The Contents.

O F Anise.	Of Fennell.
Of Lumbardey Louage.	Of Anyse.

The Table.

Of Camyn.
Of Colyander.
Of Rue.
Of Organy.
Of white Poppye.
Of Germander.

Of Cardus Benedictus.
Of Angelica.
Of Valerian.
Of Elecampana.
Of Pepper-wort.
Of Phylipendula.

CHAP. V.

Of diuer sorts of Sallet-Herbes, their manner of Sowing
and Ordering.

The Contents.

OF Lettuce.
Of Spinage.
Of Sparagus.
Of Colworts.
Of Sage.
Of Purslaine.
Of Artichocks.
Of Garlick.

Of Raddish.
Of Nauewe.
Of Parsenips and Carrets.
Of Pompiens or Mellons.
Of Cowcumbers.
Of the Beanes of Agypt.
Of Skerrets.
A most necessary obseruation.

CHAP. VL.

of flowers of all sorts both forrein & home-
bred their sowing Planting, & preserving.

The contents.

of Roses
of y^e Damask rose.

of y^e Red Rose.

The Table.

Of the white Rose.	Of velvet Flowers.
Of the Cynamon Rose.	Of Gilly-Flowers.
To make the Cynamon Rose grow double.	Of grafting of Gilly-Flowers.
Of the Prouence Rose.	Of the smells of Gilly-Flowers.
To make Roses smell well.	Of the wall Gilly-Flower.
Generall notes touching Roses.	Of the Hellytropician.
Of Lauender.	Of the Crowne-Emperiall.
Of the white Lilly.	Of the Dulippo.
To make Lillies of any colour.	Of the Hyacinth.
To make Lillies flourish all the yere.	Of the Narcissus.
Of the wood Lilly.	Of the Daffadill, Colombine, and Chesbole.
Of the Flowre de Lice.	An excellent Caution.
Of Pyonye.	A new manner of planting Flowers and Fruits.
Of Petiluis.	

CHAP. VII.

How to preserve all manner of Seeds, Hearbs, Flowers, and Fruits, from all manner of noysome and pestilent things, which deuoure and hurt them.

The Contents.

Of Thunder and Lightning.	Of Moales.
Of Caterpillers.	Of Snayles.
Of Bees.	Of Moathes.
Of Sillice.	Of Canckers.
Of Flies.	Of Garden wormes.
Of green flies.	An excellent experiment.
Of Gnats.	The Conclusion of the Kitchen-Garden.
Of Pismires.	

The Table.

Of Camyn.	Of Cardus Benedictus.
Of Colyander.	Of Angelica.
Of Rue.	Of Valerian.
Of Organy.	Of Elecampana.
Of white Poppye.	Of Pepper-wort.
Of Germaner.	Of Phylipendula.

CHAP. V.

Of diuer sorts of Sallet-Hearbes, their manner of Sowing
and Ordering.

The Contents.

OF Lettuce.	Of Raddish.
Of Spinage.	Of Nauewe.
Of Sparagus.	Of Parsenips and Carrets.
Of Colworts.	Of Pompions or Mellons.
Of Sage.	Of Cowcumbers.
Of Purslaine.	Of the Beanes of Agypt.
Of Artichocks.	Of Skerrets.
Of Garlicke.	A most necessary obseruation.

CHAP. VI.

Of Flowers of all sorts, both forraine and home-bred,
their sowing, planting, and preserving.

The Contents.

OF Roses.	Of the redde
Of the Damaske Rose.	Rose.

of

The Table.

Of the white Rose.	Of velvet Flowers.
Of the Cynamon Rose.	Of Gilly-Flowers.
To make the Cynamon Rose grow double.	Of grafting of Gilly-Flowers.
Of the Prouence Rose.	Of the smells of Gilly-Flowers.
To make Roses smell well.	Of the wall Gilly-Flower.
Generall notes touching Roses.	Of the Hellytropician.
Of Lauender.	Of the Crowne-Emperiall.
Of the white Lilly.	Of the Dulippo.
To make Lillies of any colour.	Of the Hyacinth.
To make Lillies flourish all the yere.	Of the Narcissus.
Of the wood Lilly.	Of the Daffadill, Colombine, and Chesbole.
Of the Flowre de Lice.	An excellent Caution.
Of Pyonye.	A new manner of planting Flow- ers and Fruits.
Of Petiluis.	

CHAP. VII.

How to preserve all manner of Seeds, Hearbs, Flowers, and
Fruits, from all manner of noysome and pestilent
things, which deuoure and hurt them.

The Contents.

O F Thunder and Lightning.	Of Moales.
Of Caterpillers.	Of Snayles.
Of Toads and Frogs.	Of Moathes.
Of the field Mice.	Of Canckers.
Of Flies.	Of Garden wormes.
Of the greene Flie.	An excellent experiment.
Of Gnats.	The Conclusion of the Kitchen- Garden.
Of Pisse-mires.	

The

**The Table of the second part of the
second Booke. Contayning the Ordering of
all sorts of VVoods, and the breeding of Cattell.**

CHAP. I.

**Of the beginning of VVoods, first sowing, and
necessary vse.**

The Contents.



Vood better then
Gold.
The excellent uses of
Wood.

The fencing of young Woods.
When Cattell may graze in springs.
The vse of the Clay-ground for
Woods.
A speciall note.

The plantation of Wood.

CHAP. II.

The deuision of vnder-Woods, their sale and profite.

The Contents.

THE deuision of Woods.
The value of vnderwood.
Of the sale of vnderwoods.

How to cut vnderwoods.
The fencing of sales.
The Woodwards duty.

CHAP. III.

Of High-woods, and their plantation.

The Contents.

What High-woods are.
The beginning of highwoods.

The plantation of your high-
woods.

(A)

Of

The Table.

Of planting the Elme.	Obiection.
Of planting the Ash.	Answer.

CHAP. III.

The preservation and sale of High-woods.

The Contents.

O F Trees which take wet in-wardly.	Timber for Piles or water workes.
Of Barke-bound.	The use of the Elme.
Of Hornets and Doves.	The use of the Ashe.
Of the Canker.	The use of the Walnut tree.
Of Pissemires.	The use of the Peare tree.
Of Iuye, Woodbine, and Myssello.	The use of the Maple, Beech, or Poplar.
Of Thunder and Lightning.	Of Char-coale.
Of the sale of tall Woods.	How to value Tymber.
How to chuse Timbers.	How to measure Timber by guesse.
Of Mill-Timber.	Best seasons for the sale.
Of Timber to beare burthen.	The time for Chapmen.
Timber for Poales, Wainescot, &c.	When to cut downe Tymber.

CHAP. V.

Of the breeding of Wood in rich Champaine Soyles.

The Contents.

H OW to set all sorts of Quick-sets.	The use of Willowes, Sallowes, and Oziers.
Planting of greater Trees.	The ordering of Willowes.
Of the setting of Willowes, &c.	The ordering of the Ozier.

The Table

Chap: VI.

of Planting of Hedges & Coping of Timber.

The Contents

Of what Planting is.

How to plant

The Time of Year

The Tools

The Profit of Planting

The Coping of Timber.

what Coping is.

The Season for Coping

How you shall

Cope Timber.

Of Pasture Grounds their order profit &
Generall use.

Chap: VII.

Diversities of use of Pasture.
Of Barren pastures.

Signes of barren land.

Bettering of Soile.

Sowing of good seed.

For abundance of grass.

The improvement of manure.

To helpe a slow spring.

To helpe nat. grass & plant grass.

To helpe Sun & warming.

To helpe ling & watering.

To helpe marishe & quagmire.

To helpe mossiness.

The generall use of Pasture.

grounds.

What Cattell to be bred.

of fertile ground.

The division of rich ground.

The generall use of Pasture.

of Pasture, ordering the

manner of feeding of Cattell.

how to know a fat bee.

of meadow & their order.

Preservation of meadow.

when to lay meadow.

when to know meadow.

The Inclination of Weather.

The manner of mowing meadow.

how to make hay.

to make fine hay.

to make coarse hay.

use of hay for bedding or for

use of hay for fat Cattle.

The Table

Chapt 8, 12
 a new method for the Husbandry curing
 of all manner of Cattle Diseases.

The Reason for
 the Chapter.
 Horse Disease to be
 cured in 12 Medicines
 of Inward Sickness
 1st 1st Medicine
 2nd 2nd Medicine
 of Outward Diseases
 3rd 3rd Medicine
 4th 4th Medicine
 5th 5th Medicine

6th 6th Medicine
 7th 7th Medicine
 8th 8th Medicine
 9th 9th Medicine
 10th 10th Medicine
 11th 11th Medicine
 12th 12th Medicine
 Diseases in 4 parts
 Diseases in 4 parts
 Part 1st
 for all things

finis.

The Table.

CHAP. VI.

Of plashing of Hedges, and lopping or heading of Timber.

The Contents.

What plashing is.
How to plash.
The time of yeere.
The tooles to plash with.
The profit of plashing.

The lopping of Timber.
What lopping is.
The season for lopping.
How you shall loppe Timber.

CHAP. VII.

Of Pasture-grounds, their order, profit, and generall vse.

The Contents.

Diuersitie and vse of Pastures.
Of barraine Pastures.
Signes of barrainnesse.
Bettering of Soyles.
Sowing of good seeds.
For abundaunce of grasse.
The imperfection of measure.
To helpe a slow Spring.
To helpe naughty grasse.
To helpe Sunne-burning.
To helpe ling or braken.
To helpe marrishes.
To helpe mossinesse.
The generall vse of barraine grounds.
What Cattell to be bred.

Of fertile grounds.
Denision of rich grounds.
Vse of rich grounds.
Ordering of Pastures.
Feeding of Cattell.
How to know a fat beast.
Of Meddowes, and their ordering.
Preseruation of Meddowes.
VWhen to lay Meddowes.
VWhen to mowe Meddowes.
Inclination of weather.
The manner to mow Meddowes.
How to make Hay.
To make fine Hay.
To make course Hay.
Vse of Hay for Cattell of all sorts.

The Table.

CHAP. VIII.

A new method for the Husbandly curing of all manner
of Cattell.

The Contents.

T HE reason of this Chapter.	<i>The sixth medicine.</i>
<i>All diseases to be cured with</i>	<i>The seventh medicine.</i>
<i>twelve medicines.</i>	<i>The eighth medicine.</i>
Of inward sicknesses.	<i>The ninth medicine.</i>
<i>The first medicine.</i>	<i>The tenth medicine.</i>
<i>The second medicine.</i>	<i>The eleventh medicine.</i>
Of outward diseases.	<i>The twelfth medicine.</i>
<i>The third medicine.</i>	<i>Diseases in the feet.</i>
<i>The fourth medicine.</i>	<i>Diseases in the feet, or for stifling.</i>
<i>The fifth medicine.</i>	

The end of the Table for Husbandry.

Of



Of Angling.

CHAP. I.

Of Angling: the Vertue, Vse, and Antiquitie.

The Contents.

THe Use of Angling.
The Antiquitie of Angling.

CHAP. II.

Of the Toolles, and Implements for Angling.

The Contents.

O F the Angle-rodde.	Of Lines.
Of the toppe of the Angler rodde.	Of colouring of Lines.
The Angle-rodde of one piece.	Of the Corke.
The Angle-rodde of many pieces.	Of Angle Hookes.
	Of other Implements for Anglers.

CHAP. III.

Of the Anglers cloathes, and inward qualities.

The Contents.

OF the ANGLERS
Apparell. Anglers Vertues.
Certaine Cautions.

The Table.

CHAP. IIII.

Of the seasons to Angle in.

The Contents.

T HE Anglers manner of standing.	Of Fishes haunts.
The best seasons to Angle in.	Obiection.
Seasons ill to Angle in.	Answer.

CHAP. V.

Of Baits in generall, and of euery particular kinde, their
seasons and vse.

The Contents.

S Easons for bayts.	Preseruation of Bayts.
Of Flyes.	Of making Pastes.
The making of Flyes.	

CHAP. VI.

Of Angling for euery seuerall kinde of Fish, according to
their natures.

The Contents.

O F the Goodgin, Roche, and Dace.	Of the Breame.
Of the Carpe.	Of the Tench.
Of the Chub, Chenin, or Trout.	Of the Bleke, Ruffe, or Perch.
Of the Eele.	Of the Pyke.
Of the Flounder or Sewant.	Of Snyckling of the Pyke.
Of the Grayling or Barbell.	Of the Salmon.

CHAP.

The Table.

CHAP. VII.

Of taking Fish without Angles, and of laying
Hooks.

CHAP. VIII.

Of preserving Fish from all sorts of devourers.

CHAP. IX.

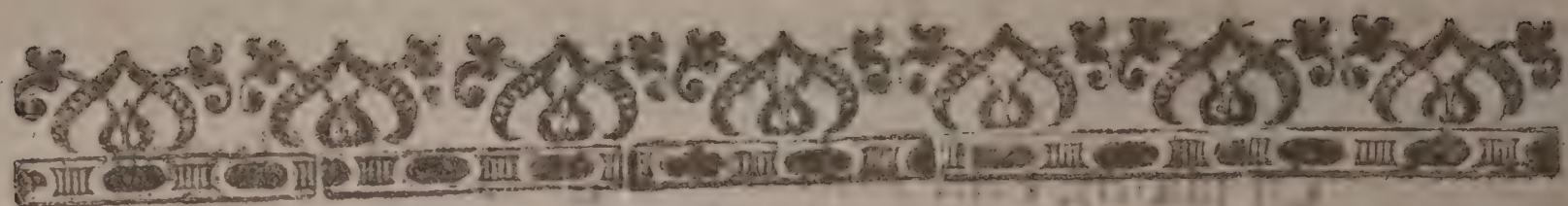
Of ordering of Ponds for the preservation of Fish.

CHAP. X.

Of the best Water-Lime.

OF

The Table.

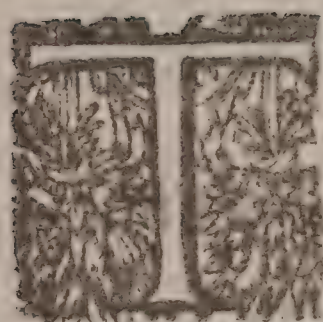


Of the fighting Cocke.

CHAP. I.

Of the Choyce, Ordering, Breeding, and Dyeting of the fighting Cocke.

The Contents.



<i>THE choyce of the Cocke for battell.</i>	<i>Of sparring of Cockes.</i>
<i>The breeding of the battell Cocke.</i>	<i>The stoning of Cockes.</i>
<i>The dyeting of Cockes for battell.</i>	<i>Of the best dyet-bread.</i>
<i>Of raking up Cockes.</i>	<i>Of the best scowring.</i>
<i>Of the Cocke-penne.</i>	<i>The matching of Cockes.</i>
<i>Of his dyet.</i>	<i>The preparing Cockes to the fight.</i>
	<i>The ordering of Cockes after the battell, and the curing them.</i>

FINIS.



I
THE
FIRST PART
of the second BOOKE of the
English Husbandman : Contayning
the Ordering of the Kitchin-garden,
and the planting of strange
FLOWERS.

CHAP. I.

How the Husbandman shall iudge and fore-know all kinde
of Weathers, and other seasons of the yeere.



Although GOD out of his infi-
nite prouidence, is the onely direc-
ter and ruler of all things, gouer-
ning the yeeres, dayes, minutes
and seasons of the yeere accor-
ding to the power of his Will:
yet for as much as hee hath giuen
vs his Creatures, and placed the
Celestiall bodies to holde their in-
fluences in vs, and all things else which haue increase-
ment, revealing vnto vs from their motions, the altera-
tion and qualities of euery season, it shall be very behoue-
full for euery Husbandman to know the signes and to-
kens of euery particular season, as when it is likely to

Raine, when Snow, when Thunder, when the Winds will rise, when the Winter will rage, & when the Frosts will haue the longest continuance, that fashioning his labours, according to the temperature or distemperature of the weather, hee may with good iudgement and aduise, eschew many euils which succede rash and vnfore-seeing actions.

Of Rayne.

To speake then first of the generall signes of Raine, you shall vnderstand that the olde Husbandmen did obserue rules generall, and rules speciall: the generall rules were such as concerned eyther all, most, or a great part of the whole yeere: the rules speciall, those which concerned dayes, houres, and times present: of which I will first speake in this place.

Signes from Clouds.

If therefore you shall at any time perceiue a Cloud rising from the lowest part of the Horizon, and that the maine body be blacke and thicke, and his beames (as it were) Curtaine-wise, extending vpward, and driuen before the windes: it is a certaine and infallible signe of a present shoure of Raine, yet but momentary and soone spent, or passed ouer: but if the Cloud shall arise against the Winde, and as it were spread it selfe against the violence of the same, then shall the Raine be of much longer continuance.

Signes from the Moone.

If when you see the new Moone appeare, you perceiue that some part of her Hornes are obscured, or if it be black, or discolored in the midst: if it hang much to the West, if it be compassed or girdled about, eyther with thicke, or waterish transparent vapours: if it looke more then ordinarily pale, or if it shall beginne to raine small and mist-like on the fourth or fift day of her age, all these are infallible signes of Raine, and the last an assured signe that the Raine will continue all that quarter of the Moone following.

Signes from the Sunne.

If you shall see the Sunne rise early in the Morning, and spread forth his Beames violently, yet with a very moyst and waterish complexion, and there-withall in the

West

Whest you doe see a bedde of thicke vapours to arise, increase and ascend upward, then shall you bee assured that at high none, when those vapours and the Sunne shall meet, there will be raine, and that raine of no short continuance: If you shall see the Sunne rise red, and turne sodainely blacke, if it haue many red clouds about it mixt with blackenesse, if it haue a spacious Circle about it, or if when it setteth you see it fall behinde a banke of darke and blacke Cloudes, they be all most certaine and infallible signes of raine, which will presently follow.

If it lighten at none, or any time whilst the Sunne shineth, epyther with Thunder or without thunder, or if it lighten in sayze weather, or if it lighten more then it thundereth, all are most certaine signes of raine which will follow.

Signes from
the Lightning.

If you shall perceiue water. Fowle to bathe much: if the Crow wet her head at the water brimme, or if shee wade into the water, or if she shall cry and call much: if the Raven shall croake with a hollow or sounding voyce: if the house-Cocke shall crow at all houres: if Pigeons shall come home late to the Dove-house: if Sparrowes shall chyrpe and cry earely in the morning: if Bees flye not farre from their Hynes: if Flies and small Gnats bite sharpe and soze, all are most certaine signes of raine, which will presently follow.

Signes from
Fowle.

If you shall perceiue your Oxen to eate more greedily, and with a more earnest stomacke then their vsuall custom: if your kine gaze and looke much upward: if Swine shall play and gambole vp and downe: if Horses being at grasse shall scope, course, and chase one another: or if the Cat shall wash behinde her eare, all are certaine signes of raine to follow.

Signes from
Beasts.

If Salt turne moyst standing in dry places, if Channels, Maults, and common Seluers stinke more then vsuall: if Bees seeme to sound louder then they were wont: if the Tazell at any time close vp his prick: if

Signes from
things without
motion.

Soote fall much from the Chimney : If oyle shall sparkle much when it burneth, or if Marble, Paving-stone, or other wals shall sweat, or be much moyst, all are most inevitable signes of rayne which will follow.

Signes of
much Raine.

If Raine, when it falleth, make great bubbles, or such a noyse as is not ordinary : or if raine fall mildly, small, and mist-like : or if rayne fall in a calme when no winde stirreth : or if when it rayneth you cannot perceiue the Rache or Clouds to moue : if Bullen flye to their roost as soone as the raine begins : if the Raine-bow stretch towards the South, or if it doe reflect and shew double : if you shall see one or more Weather-gals which are like Raine-bowes, onely they arise from the Horizon but a small way upward, all these are most certaine signes of much raine that will follow.

Signes of
Snow or
Haile.

If blacke Clouds shall turne sodainely white : if about eyther the Sunne or Moone be pale, and waterish Circles, or that they seeme to shine as through a miste : if the Ayre be thicke and extreame cold without frosts : if with the signes of raine be mixt signes of cold also, or if windes be nipping and extreame sharpe, all are most certaine tokens that Snow or Hayle will follow presently after.

Signes of
winde.

If when the Sunne setteth it looketh red and fiery, and that all that part of the Horizon looke red also, or if it looke blewish, or seeme greater then his ordinary proportion : If the Moone doe blush or looke high coloured, if the Rache ride high, and the Firmament be much vaulted : if Woods and Hills seeme to make a noyse : if the Stars seeme to shine brighter then usual : if it shall thunder in Winter, or if it thunder without lightning : if Bels be heard farre off with more ease then accustomed, and presently in the same instant be not heard at all : If Cobwebs flye much in the ayre : If Hernes or Heronshoes cry much in their flying : If fire sparkle much, or if wood or Mainstot cracke much, all these are most certaine signes of much winde that will follow after.

Signes of tem-
pests.

If you shall perceiue the Morning or Evening Sunne,
eyther

the English Husbandman.

5

eyther in the Sommer or in the Autumne, to shine hotter or to scorch more then accustomed, when the ayre is prest with an extreame blacke cloude, or with many clouds, if you perceiue whirlewindes to blow oft and violently: if you see the Raine-bow shall appeare in the West without raine: if you see flames and meteors flashing in the ayre, or if the Porpus shall be seene in the fresh Riuers, all are most certaine signes of thunder, lightnings and tempests, which will follow.

If the Sun rise gray and cleere in the morning, and likewise setteth without darknesse, not losing a minute in the declination: if the evening skye be ruddy and not fierie, more purple then skarlet: if the Moone be cleere when it is foure or fife dayes olde: if it lighten after Sunne-set without thunder: if the dewe fall in great abundance and in the rising ascend vp to the mountaines: if the North winde blow strong: if the Owle doe whup much and not scrytch: if flies at night play much in the Suns beames: if Crowses flocke much together, and cakell and talke: if Bats flye busily vp and downe after Sunne-set, if you see Cranes flye high, and water-fowle make their haunts farre off from the water, all these are most certaine signes of very faire weather which will follow after.

Signes of faire weather.

If water-fowle forsake the Water: if the Nighthingale sing more then other Birds, if Cranes flocke together, if Geese fight for their feeding place, or if Sparrowes call very earely in the Morning, any of these are certaine signes that winter is nere at hand.

Signes of Winter.

If the West winde blowe freshly Morning and Evening: if the colde abate and lose much of his vigor, if Swallowes begin to come in and flye busily about, if the breast-bone of the Mallard or Woodcocke looke white and cleere, any of these are certaine signes that the Spring is at hand.

Signes of the Spring.

If the Hamme ride in the Spring, and shew more then an vsuall lust: if the Spring haue beene very extraordinary

Signes of a hot Sommer.

harily colde, or if Mildewes fall not in the Woodlands Countreys, any of these are certaine signes of a hot Summer to follow after.

Signes of a
long Winter.

If you shall see the Dake loaden with Akornes: if the brest-bone of the Mallard when he is kild looke red: if Hornets be scene after the end of October, or if Cattell doe trample and tread the earth much, making it myzie, or like a new plowde field: any of these are most certaine signes that the Winter will be sharpe, long, and cruell.

Signes of a
forward or
backward yeere.

If there fall much Raine before October, by meanes whereof many inundations doe follow, and that such wet lye long aboue ground: it is a most infallible token that the yeere will be very forward: but if the wet doe fall after October then it is a signe that the yeere will be indifferent, but and if the wet fall after November, then it is held for most certaine that the yeere will fall out very slacke and backward.

Signes of a
good or bad
yeere.

If the Dake Apples, when they are opened, breed flies, or if Harvest be seasonable, and the Spring warme: if Snow fall in February: if Worme put forth great store of Flowers: if the Walnut-tree haue more blossoms then leaues: if the flower of the Sea-Onion wither not quickly, or if the Spring be preserved from frosts and blasting, then any of these are certaine signes that the yeere will proue passing good and fruitfull: but if the Dake Apple breede instead of a Flye a Spyder: if Comets or Meteors appeare the Ayre: if the Sommer fall out vnnaturally moyst: if the dewes when they fall at the rising of the Sunne descend to the Riueres: if frosts come in vnseasonable times: if Wood-Birds flye to the plaines, and refuse couert: if the Sunne haue his whole body, or at least thre parts Ecclipsed: when Cozne beginneth to blome, and is not fully kirkeld, then any of these be most certaine signes that the yeere will proue bad, barrayne, & fruitlesse.

Signes from
Christmas day.

Againe, if Christmas day shall fall vpon the Sunday, the yeere shall be good, seasonable and abounding with all store and plenty: if it fall vpon Monday the yeere shall be

be reasonable temperate and fruitfull, onely something subiect to inundation of waters, losse by shipwacke, and some mortality of people, especially women in childbearing: if it fall vpon Tuesday, the yere will proue very barraine and vnfruitfull, much dearth will raigne, and amongst people great plague and mortallitie: if it fall vpon Wednesday, the yere shall be reasonably seasonable, though a little inconstant: there shall be plenty of all things, onely much sicknesse, and great likelyhood of warres: if it fall vpon the Thursday, the yere shall be generally very temperate and wholesome, onely the Sommer subiect to moistnesse, much deuision is like to fall amongst the Clergie, and women shall be giuen to more laciuousnesse then at other seasons: if it fall on the Friday, the yere shall be barraine and vnwholesome, for sicknesse shall rage with great violence, much mortallitie shall fall amongst yong Childezen, and both Corne and Cattell shall be scarce, and of a deere reckoning: if it fall on the Saturday, the yere shall be reasonably good and plentifull, onely the people of the world shall be exceeding peruerse, & much giuen to mutinie & dissention one against another.

Againe, if the Sunne rise without impediment, and shine bright and cleere vpon Christmas day, the yere will be very plentifull: if it rise likewise cleere the second day in Christmas, then Corne will fall in price: if it rise cleere the third day in Christmas, there will onely be dissention in the Church: if on the fourth day, it shewes trouble vnto yong persons: if on the fift day, it shewes that many good things will increase: if on the sixt, doubtlesse every Garden will bring forth great plenty: if on the seauenth, then is much dearth and scarcitie to be feared: if it shine cleere on the eyght day in Christmas, then there is likely to be great store of Fish: if on the ninth, it will doubtles proue a good yere for all manner of Cattell: if on the tenth, the yere is likely to yeeld much cause of mourning: if on the eleauenth, there will fall much fogges, thicke mistes, and great infection will folloio after.

Lastly,

Signes from
the Sunne rising.

Lastly, if the Sunne shine cleere the twelfth day after Christmas, it fore-shewes much warre and troubles, with great losse and bloudshed.

Signes from
the twelue
dayes in
Christmas.

Againe, according to these former obseruations, you shall vnderstand, that what weather shall fall or be on the five and twentieth day of December, the like weather shall be all the moneth of January after, what shall be on the seauen and twentieth of December, the like shall be all the moneth of February following: what weather shall be on the eight and twentieth day of December, the like weather shall be all March following: what weather shall be the nine and twentieth day of December, the same shall be all Aprill after: what on the thirtieth, the same all May: what on the one and thirtieth the like all June following: what weather shall fall on the first of January, the same shall be all July after: what on the second of January, the same all August after: what on the third, the same all September after: what on the fourth, the same all October following: what on the fift, the same all Nouember after, and what weather shall fall on the sixt of January, which is Twelfth-day, the same weather shall fall all December following.

Signes from
Saint Pauls day.

Againe, if Saint Pauls day proue sayre, dry and bright, it fore-sheweth plenty of all things the yere following: but if it be milky then it shewes great dearth of Cattell. If there fall vpon that day Snow or Raine, then it shewes Famine and Want of Corne, but if it be windy, tempestuous, or if it thunder, then it sheweth that great warres will follow.

Signes from
Maudlin, and
Saint Swythens
day.

Againe, looke what quantitie of raine falleth eyther on Mary Maudlins day, or on Saint Swithens day, be it more or lesse, the same proportion will fall for the space of forty dayes after: but if these two dayes be sayre and dry all the time of Haruest will be so also.

If Corne shall
be cheape or
deare.

Now if you will know whether Corne shall be cheape or deere, take twelue principall graynes of Wheate out of the strength of the eare, vpon the first day of January,
and

the English Husbandman.

9

and when the hearth of your Chimney is most hot, sweep it cleane, then make a stranger lay one of those Graynes on the hot hearth, then marke it well, and if it leape a little, Corne shall be reasonably cheape, but if it leape much then Corne shall be exceeding cheape, but if it lye still and moue not, then the price of Corne shall stand, and continue still for that Moneth : and thus you shall vse your twelue Graines, the first day of euery Moneth one after another, that is to say, euery Moneth one Graine, and you shall know the rising and falling of Corne in euery Moneth, all the yeere following.

If it shall thunder much the first Sunday of the New yeere, it shewes great death and mortallitie amongst learned men : if it thunder the first Monday, it shewes great death of women, and many Eclipses of the Sunne : if it thunder on the first Tuesday, it shewes plenty of Corne, but much Warre and dissention : if it thunder on the first Wednesday, it shewes mortallitie and death amongst the worst sort of people, both Male and Female, besides much Warre and bloudshed : if it thunder on the first Thursday in the New-yeere, it sheweth much plenty of Corne that will follow : if it thunder on the first Friday, it betokeneth the losse of great personages, and men of authoritie, many affrayes and murders, with much perill and danger. Lastly, if it thunder vpon the first Saturday in the New-yeere, it foresheweth onely a generall plague and infection, which shall raigne with strong violence.

Signes from
Thunder.

If you shall perceiue the Summer and Spring time to fall out very moyst and rainy, without winde, yet in their owne natures very hot & scorching, or if the Southerne or South-west-winde blow much without raine : if many fogs and mists fall in the Morning, and overcome the Sunnes beames at noone also : if the Sunne suffer any large Eclipse : if Autumne and Winter be more foggy then moyst or cold : if the Dowe or Leauen, of which you mould your bread, doe quickly mould and cleave together without labour : if Dogs runne madde, if Birds

Signes of sick-
nes or health.

C

forsake

forlake their nests : if Shéepe rot : if Fennes, Marrish-grounds, and muddy places abound with Frogges : if Mud-wals bræde Swine lice or Sowes : if Moales forlake the earth : if the small Pocks or Meazels be rife and abound in the Spring time, or if women generally doe miscarry in childe-bedde, any of these are most certaine signes of much sickenesse and mortallitie that will follow the yere after : and all such signes as are directly contrarie to any of these, as if the Summer and Spring doe fall out drye and windy : if the South or Southwest winds bring with it ever rayne : if no fogs or mists oppresse the ayre, and so forth of all the rest which are before shewed, are most certaine and infallible tokens of a very wholesome and healthfull yere, which will ever follow after.

The preseruation of health.

Now for the preservation of your health, and to prevent all such sicknesses as are incident to follow in these casuall and dangerous yeres : through every severall moneth in the yere you shall observe these few precepts.

First, in the month of January you shall forbear to let blood, unlesse upon violent extreamitie, & that the signe be exceeding good for the same, you shall drinke white wine in the morning fasting, & rub your head with a course Towell very hard, but yet cleane, for it is a most wholesome friction.

In the month of February, you shall not let blood for wantonnesse, but neede : you shall forbear Hearbe-pottage, for at that time onely they are least wholesome : you shall keepe the soles of your fete from wet, and vse every morning your former friction.

In the moneth of March, the signe being good, you may let blood according to your youth, strength, and necessitie : you may take hot and sweet meats and drinks, especially Almonds, Figs & Relyns, & vse also your former friction.

In the month of Aprill, you may bleed as in the month of March : in it also you may purge, by the order of a learned director : let your dyet be hot and fresh meats, and your drinke temperate : also in this moneth your former friction is exceeding wholesome.

In

In the month of May be no fluggard, for the bed is very wholesome, clarified May is this moneth a most soueraigne drinke, and Sage with sweet Butter is a most excellent breakfast: yong Lettuce is an approued good Sallet, and the intzals or offall of Beasts would by all meanes be refused, it is also good to let blood in this month onely for necessitie, and not for pleasure, and beware by all means, not to go wetshod in the dew in the morning.

In the month of June obserue the dyet of May, or if you be of youthfull blood it is not amisse if it be a little cooler, and for bleeding let it be for urgent necessitie.

In the month of July eschew all wanton bed-sport: and if each morning you take a draught of clarified Butter Milke it is very wholesome: vse coole Julyps, and meats that are fresh, and not sterring: now forbear Lettice, and bleede not, except it be in cause of great extremitie.

In the month of August forbear all manner of Worts, and Cabadges, and generally all meats and Spices which are hot and inflaming: but by any meanes bleed not at all, except by the direction of most approued learning.

In the month of September you may eat any sort of ripe Fruits: you may bathe in hot bathes, for colde causes, at your pleasure, and you may let blood according to your necessitie: those foods are best which are of lightest digestion, and those drinckes most wholesome which are rather strong then scouring.

In the moneth of October, spare not any blood, except great extremitie compell you, and for your dyet, let it be of such foods as are most strong and nourishing, and your drinke Boere or Ale, of indifferent strength, and now and then at the midst, and end of meales, a draught or two of such Wines as are pleasant, strong, and wholesome: Sallets of Flowers, preserved in Vinegar & Sugar, as either Violets, Bzome-flowers, or Gelly-flowers of all kindes, or Samppze, Purslan, or Beane-cods, preserved in pickell, are of excellent vse, both in this moneth, and the other two which follow.

In the Moneth of November open also no vaine, but for great need, because the blood is then gathered together into the principall vessels: Bathing in this Moneth is utterly to be refused, onely let your body be kept warme, and euery colde humour or obstruction, rather dissolved by moderate frictions, as is shewed in the moneth of January and February, then by the violence of any other inward medicine. Shell-Fish in this moneth is very wholesome, and so are all other sorts of Fish, which are not too rawe or slimie.

In the Moneth of December blood-letting should be also forborne, except vpon some especiall dayes, as after the five and twentieth day at the soonest: and for your diet let it be meate which is hot and nourishing, but by no meanes that which breedeth melancholie blood. Use strong Wine and sharpe Sauces: as for the warmth of your body, next vnto good cloathing, let it euer proceed from exercise that is moderate, then from toasting, or broiling your selfe against the fire, for in this Month that body can hardly be sound whose sinnes are made pyde and motley with the fiers scorching.

And thus much touching the experience of the English Husbandman in these fore-knowledges, and ayming after the times to come, being drawne from the obseruations and rules left vs by succession of times of those learned Fathers, and other best knowne and approued in these knowledges: yet I doe not binde euery Husbandman to make as it were new Creds of these Principles, but onely to giue them to his memozy, as things that will neither oppresse nor hurt it, and if in any seldome-scene particularitie, any shall vary from the purpose of the relation, to remember that there is aboue vs a God of all Truth and Knowledge, who will dispose and gouerne all things, according to his good Will and Pleasure: to which let euery Creature submit, in as much as hee onely knoweth what is for mankinde most best and most conuenient.

C H A P. II.

The choyce of ground for the Kitchin-garden, and the ordering thereof.



A promise honest and profitable, being seriously made, I holde a sinne capitall to neglect, especially where the goodnesse stretcheth it selfe over a whole Kingdome: and hence I haue assumed to perfect both my promise and my labour in building vp that weake foundation which I formerly laid, of the English Husbandman: wherein, contrary to all other Authoꝝ, I am neither beholden to Pliny, Virgil, Columella, Varo, Rutillius, Libaule, noꝝ any other Forrainer, but onely to our owne best experiencd Countrey-men, whose daily knowledge hath made them most perfect in their professions: and what better instruction can be had then that which we receiue from the professors, being men of our owne neighbourhood, acquainted with our Climate and Soile, and the necessary things agreeing with the bettering of the same: and not resort, as our Translatoꝝ haue done, to strangers helpe, who tels you that you must measure your ground with Asses dung, when our Kingdome hath not so many foure-footed Asses as wil measure one Acre, and many such like things which our Kingdome affoꝝdeth not: therefore according to the plaine true English fashion, thus I pursue my purpose.

Touching the choyse of Ground, I haue in the former part of this Booke shewed you the true nature and goodnesse of euery seuerall Soyle: and you are to vnderstand that the best Soyle is best foꝝ this purpose, because it is least laboꝝsome, and most profitable: yet notwithstanding that some of our translated Authoꝝ doth vtterly disallow foꝝ Gardens many Soyles, as namely, all Sands, all Chalkie earths, all Grauell, all Earths like dust, and any Earth which chappeth oꝝ openeth in the heat of

The choyce of
Ground.

Summer, by that meanes depriuing almost halfe our kingdome of the benefit of Gardens, yet I assure you there is no Soyle whatsoeuer (if it lye from the inundation of water, or be not absolutely boggy) but with industry will beare any Fruit, Hearbe, or Flower, plentifully, and without any casualtie proceeding from the barraines therof: witness a most worthy Garden in the barren Heake of Darbyshire, where there is no curious Tree or Plant wanting, nor doe they flourish in any place more brauely.

The bettering
of Grounds.

The trenching
of Grounds.

Now for mine owne part, I write generally to all Husbandmen, not to those onely which liue in fertile and fat Soyles, and therefore I would haue no man say, the Soyle where I liue is so barraine, that I cannot haue a Garden: for if the Soyle wherein you liue, be barraine, then shall you in the latter end of September breake vp your earth more then a Spade-graft deepe, and be well assured that at euery Spade-graft you breake the mould well, and leaue not the rootes of any weeds within it, then let it rest till the midst of October, at which time if any weeds appeare vpon it, by all meanes let them be pluckt vp by the rootes; which done, you shall trench your ground at least a yarde and a halfe deepe, and then bury in those trenches, if it be a Sand or grauell earth, great store of Dre or Colw measure, if it be a colde Chalkie Clay, or a moyst ground, then great store of Horse manure, of both which manures the oldest and rottenest is the best: but if you liue in such a Soyle as there is neyther of these manures bred therein, then take Straw of any kinde whatsoeuer, and spread it in the high-way where there is much trauell, & when it is rotten with the beating of Horse feet, then cause it to be shoueld vp, & with it fill your trenches, but if Straw be wanting, then if you haue any muddy ditches or ponds, scowze the mud out of them, & with it fill vp your trenches: & although these are not so long lasting as the two first sorts of manures, yet they are sufficient to bring forth increase, & must supply where necessity inforseth, alwayes hauing discretion when you see your ground abate

abate in fruitfulness, to replenish it with fresh manure.

Now as you fill your trenches with manure, let one mixe the earth therewithall, and as it were blend and incorporate them together: thus having gone over so much ground as you intend to plant or sowe upon, you shall let it rest till the midst of January, at which time you shall breake it up in trenches againe, but not above three quarters of a yarde deepe, and then fill up those trenches with manure as before, and lay your earth as leuell as is possible, & so let it rest till the beginning of March (if the weather be seasonable for sowing or planting) otherwise let it stay till mid-March, and as soon as the Moone is changed you shall then dig it up the fourth time, and make it fit to receyue your seede, but in this fourth time of turning over your earth, you shall dig it but a little better then a Spade-graft depth, and ever as you dig it, mixe it with fresh manure: if your ground be subject to much chapping or rising, then you shall at this last digging mixe the earth with ashes and Horse manure mixt together, which will binde and holde the earth from chapping.

After you have digd your ground in this order, and made it leuell, you shall with an Iron Rake breake the great clods of earth, and bring it to as fine a mould as is possible, ever observing that if in the breaking of the clods or otherwise, you perceiue the roots or stalks of any weeds to arise, you shall presently with your hand pull them out, and cast them on heaps, that they may serue eyther for the fire or the dunghill: which done, you shall tread out your beds in such orderly sort, that you may passe from one to the other without eyther treading upon the beds, or striding over them: & thus much for the barrenne & sterill ground, which although all ancient & late writers reiect, as not worthy to be employed to this vse, yet beleue it, being husbanded as is said before, it will equall in fruitfulness the best ground.

Touching your rich and perfect grounds, which of themselves are apt to put forth with little labour, you shall onely at the latter end of September breake up the earth,

Of breaking
the Garden
moulde.

Ordering of
Garden beds.

Of the fruit-
full Soyle.

Earth, and making greater Trenches, fill them well with Dre meanure, and then turning the Earth vpon the meanure, leuell your ground very carefully, breake the clots and rake it very painefully, and then treade out your beds, as is befoze sayd, artificially: but if the ground which you breake vp, be eyther Greene-swarth, or much overgrowne with wæds (as these rich soyles must euer be the one or the other) (for they will not be idle, but continually bringing forth) then at this first digging and dunging you shall haue diuers which shall follow the Spade, who shall take away all manner of roots, grænes, grasse-tufts, stones, or whatsoever may breede annoyance to the ground: which worke being perfect, you shall let the ground rest all winter till the beginning of March, that the frost may mellow and ripen the mould, and also kill the roots of such wæds as the Spade hath turned vp, and haue bene omitted to be pulled away.

Now so soone as March is come, vpon the first change of the Moone, you shall digge vp this Earth againe, leuell it, and order it in all points as was sayd of the barraine Earth, onely there will neede no more vse of meanure, but as soone as it is digged, raked, leuelled, and brought into a fine mould, you may then tread out your Beds, as aforesayd, euer proportioning the quantitie of them according to the quantitie of your seedes, hauing the most of that which is most in vse, and the least of the contrary.

Now as touching the fencing and inclosing of your Garden, I haue in the former Booke shewed you the same at large, and giuen severall instructions, according to mens severall abilities, with this caution, that whether your fence be wall, pale, dead-hedge, ditch, or quickset, yet it must be so high that it may with assurance keepe all manner of Pullen from flying ouer the same, who are the greatest enemies to a Garden that may be.

There would be also in this Kitchen-Garden, if with conueniency it may be brought to passe, eyther a Pumpe, Well, or Cesterne, which might flow continually with water

The necessa-
riest Ornament
in a Garden.

water all the Summer time, for the watering of Hearbs, as shall be hereafter declared. And thus much touching the choyce of ground for a kitchen-garden, and the ordering of the same.

CHAP. III.

Of the sowing and ordering of all manner of Pot-hearbs.

When you haue prepared your ground, and cast your beds in an orderly fashon, as is before spoken, you shall then take your Seeds, which Seeds would by no means be aboue a yere olde: and hauing sorted them seuerally, euery one by it selfe, and appointed the beds which shall seuerally receiue them: you shall in this manner sowe your Pot-hearbs, which craue not much roote, because their onely benefit is in the leafe: take your seeds and put them into a wooden Tray, then take of your Garden mould, the finest that may be, being made almost as fine as ashes, and mixe your Seeds, and that mould very well together, then goe to the bedde where you meane to bestow them, and hauing newly racht it (to stirre vp the fresh mould) with your hand sprinkle and sowe them all ouer the bed, so thicke as may be: which done, with a fine Rake, rake the bed gently ouer, then taking spare fine mould, put it into a ridling Sine, and sift it ouer the bed better then two fingers thickenesse, and so let it rest: thus you shall doe seuerally with euery seede one after another, bestowing euery one vpon a seuerall bed.

Now for your Pot-hearbs, which are most generally in vse, they be these: Endiue and Succorie, which delight in moyst ground, and will endure the winter. Blecte of which there be two kindes, Red and White: this Hearbe neuer needeth weeding, and if he be suffered to shed his seed

Of all sorts of Pot-hearbs.

Of Endiue and Succorie.

it will hardly euer to be got out of a Garden.

Of Beets.

Then Beets, which must be much wooed, for they loue to liue by themselves, and if they grow too thicke you may take them vp when they are a finger long in their owne earth, and set them in another bed, and they will prosper much better.

Land-Cresses.

Then land Cresses, which is both a good Pot-herbe, and a good Sallet-Herbe: it loueth shadowie places, where the Sunne shineth least, and standeth in need of little dung.

Parcely.

Then Parcely, which of all Herbes is of most vse, it is longest in appearing aboue ground, and the elder seed is the quicker in growth, but not the surer; but eyther being once come vp increase naturally, and doe hardly euer decay: it cannot grow too thicke, but as you vse it you must cut off the toppes with your knife, and by no meanes pull by the rootes: if it be put into a little purse, and beaten against the ground, to bruise it a little before it be sowne, it will make it haue a large crisped leafe.

Of Sauory.

Then Sauory, of which are two kindes, the Winter-Sauory, and Summer, both delight in leane ground, and are quicke of growth, and long lasting.

Of Time.

Then Time, of which are also two kindes, the running Time, and the Garden Time: they delight in fertile ground, and from the seed are very slow of growth, therefore it is best euer to set them from the slip. The running Time doth delight in the shadow, but the Garden Time in the Sunne.

French Mal-
lowes.

Then French-Mallows, which will ley in any ground, and are quicke of growth.

Cheruell.

Then Cheruell, which will not by any meanes grow with any other Herbe.

Of Dill.

Then Dill, which may be sowne almost in any moneth of the yere as well as March: it endureth all weathers, but loueth the warmth best.

Of Isop.

Then Isop, which in like manner as Time is, slow of growth from the seed, and therefore fitter to be set from the

the slips, after it hath once taken roote it encreaseeth wonderfully, and will hardly be destroyed.

Then Mints, which flourish onely in the Summer time, but dye in the Winter, it delighteth most in the moyst ground. Of Mints.

Then Violets, the leaues whereof are a good Hot-herb, and the flowers preserved in clese glasse pots, with strong Wine-vinegar and Sugar, a most excellent Sal-
let: it both delight to grow high, and will grow speedily eyther from the plant or from the seed. Violets.

Then Basil, which would be sowne in the warme weather, as at the beginning of May, for the seed is tender, and when you haue sowne it, you shall presse the earth downe vpon it with your foot, for the seeds can endure no hollownesse: if you sow it at the fall of the Lease, you shall sprinkle the seeds with Vinegar, and when you wa-
ter it let the Sunne be at his height. Of Basil.

Then Sweet Marioram, which would be sowne on rich ground, and farre from Sunnesheine, for it taketh no light in his beames. Sweet Mario-
ram.

Then Marigolds, which renew every moneth, and endure the Winter as well as the Summer: this Herbe the oftner you remoue it, the bigger it groweth. Marigolds.

Then Strawberries, whose leaues are a good Hot-herbe, and the frutt the wholesommiest berry: this Herbe of all other, would be set of the plant, and not sowne from the seed, for the oft changing and remouing of it causeth it to grow bigger and bigger: it groweth best vnder the shad-
dowes of other Herbes, but very sufficiently in beds, or else where. Of Straw-
berries.

Then Borage and Buglosse, both which are of one nature: they would be sowne in small quantity, for where they take they will runne ouer a whole Garden: the seed must be gathered when it is halfe ripe it is so apt to shed, and when you gather it you must plucke vp the stalkes, leaues & all, and so laying them one vpon another three or foure dayes, their own heat will bring the seed to ripenes. Of Borage
and Buglosse.

Of Rosemary.

Then Rosemary, which is an Hearbe tender and curious, yet of singular vertue: it is sone slaine with frost or lightening: it will grow plentifully from the seed, but much better from the slip, it delighteth to be planted against some Wall where it may haue the reflection of the Sunne, for to stand vnproped of himselfe, the very shaking of the winde will kill it.

Of Penroyall.

Then Penroyall, which most properly is vsed to be mixt with Puddings, made of the bloud of Beasts, & Datmeale: of it there be two kinds, Male and Female: the Male beareth a white flower, and the Female a purple: it must be sowne in small quantity, for it will runne and spread ouer-much ground: it delighteth most in moist earth.

Of Leekes.

Then Leekes, which would haue a fertile ground, and as sone as they be shot vp a good length you shall cut the blades to the polt, and then remoue the heads, and set them borderwise about your other beds: this removing after the cutting off the blades, will make them grow bigger, and prosper better, as for thrusting Oyster-shells or Tyle-Wreaths vnder them, to make the heads bigger, it is a toy, for if the mould be loose and good, the Leek will come to his perfect growth: they may be sowne both in March, Aprill, May, and Iune, and they may be removed all Iuly, August, September and October.

Of Onions.

Then Onions, which differ not much from the nature of Leekes, they loue a fertile Soyle, and would be sowne with the seeds of Sauoy: when they come vp if they grow too thicke, as is often sene, you shall plucke vp some and spend them in the Pot and in Sallets, to giue the rest more roome, and some you shall take vp and replant in other beds, which you may preserve for seed: those Onions which you would not haue to seed, you shall cut off the blades in the midst, that the iuyce may descend downward, and when you see the heads of the Onions appearing aboue the earth, you shall with your feet tread them into the ground: there be some very well experient

Husbands,

Husbands, which will take the fayrest, goodliest and soundest Onions they can get, and in this moneth of March set them thre fingers deepe in the earth, and these of all other bring forth the purest and best seede, for which purpose onely they are preserved: as sone as your seed-Onions are knotted, you shall enterprowpe them with square cradles, made of sticke, least the waight of the boules which carry the seede, should breake the blades.

The time of gathering your seede is, when it is all turned purely blacke, and the time of gathering the Onions is, when the heads doe forsake the earth, after they be gathered you shall lay them on a dry floure for a fortnight, or more, and then binde them vp in ropes, and hang them where they may haue the ayze of the fire, onely note that shall gather your Onions in the increase of the Moone, as they were sowne, and not otherwise.

Of gathering
Onion-seede,
or the Onion.

Many other Pot-hearbs there be, which for as much as they differ nothing, eyther in sowing, planting, or ordering, from these which I haue rehearsed, I will here omit them, and thinke this sufficient, touching the sowing and ordering of all manner of Pot-hearbs.

CHAP. IIII.

Of the sowing of certaine Hearbs, which are to be eaten, but especially are medicinall, yet euer in the Husbandmans Garden.



If Hearbes which are medicinall, I will begin with Arage. or Orache, which being colde and moyst is very excellent against the hot Sore: it is to be sowne in any moneth, from February till December: it loveth much moisture, and therefore must be oft watered: it must be sowne exceeding thicke, and quickly covered, for the ayze is offensive.

Of Arage.

Of Lumbardy
Louage.

Next it is Lumbardy, Louage, which being hot and dry, is very purgative, it desireth a very fruitfull ground, but if it be sowne where it may haue much shadow and some shelter accompanied with moisture, it will grow in any ground, the moneths for sowing thereof, is, from the midst of February till Harvest.

Of Fennell.

Fennell is also hot and dry, and it comforteth the stomacke, openeth the inward vessels, and helpeth digestion; it may be sowne in any moneth, and vpon any indifferent ground, especially if it be a little stony, the seede would not be very old, though of all other it be the longest latter.

Of Anise.

Anise is hot and dry, it dissolueth humors and obstructions, and is very comfortable to weake stomacks, it delighteth in a good and loose mould, and is to be sowne in the height of the Spring onely.

Of Comin.

Comin is of the nature of Anise and Fennell, and mixt with either, is very soueraigne against all inward sicknesses proceeding from cold, it loueth a fruitfull rich earth & much warmth, and therfore the later it is sowne in the Spring, it is so much the better, and aboue all things it would be sowne in the hottest time of the day, & if it be mixed with other seeds, it is so much the better, and appeareth the sooner.

Of Coliander.

Coliander is of the nature of the earth, cold & dry, it helps digestion, & suppresseth vapours which offend the braine, it may be sowne vpon any indifferent ground, & in any month except December and January, the elder the seedes are the better so they be sound, and they desire much watering.

Of Rue.

Rue or Hearb-grace is hot and dry, & is very soueraigne against all inward infection, putrefactions, and impostumations, it isgeth in any reasonable ground so it grow warme and dry, the moneths fittest for the sowing thereof, is March, Aprill or May, and the mould would be firme and not subiect to rying, whence it proceedes that no manure is so good for the encrease thereof as horse-dung and ashes mixt together: the beds would be made high & disceending, that no moisture may stay thereon, they must be carefully weeded, for in their first growth otherwise they are some choaked.

Organic

Organic is hot and dry, and excellent against any sickness of the liver, the ground in which it most ioyeth would be a little stonie, and full of rubbish, yet by no means undunged, the moneth fittest for the sowing thereof is March and September, the Moone being in Libra or any other moist signe, it must be continually watered till it appeare above the earth, but after forborne, for being once well fixed, it is ever certaine.

Of Organic.

White Poppy is cold and moist, and much prouoketh sleepe: it delights to be sowne in a rich, warme, dry ground, in the moneths of March, September or November.

Of white Poppy.

Germander is hot and dry, and excellent against the Kings euill; obstructions of the Spleene and hardnesse of the time; it is a hard herbe, and will prosper in any ground, it is to be sowne, either in the spring or fall of the lease, and is most comly for the setting forth of knots in Gardens.

Of German-der.

Cardus Benedictus, or the blessed Whittell, is hot and dry, it is very soueraine against most inward sicknesses, stancheth blood, and is a great comforter of the braine, it delighteth in a rich ground and a loose well tempered mould, it must be sowne very shallow, and not couered above two inches deepe, the first quarter of the Moone is best to sowe it in, and in the moneths of March, May or September, if you sowe a little fine flaxen Wheat with it, no doubt but it will prosper the better.

Of Cardus Benedictus.

Angellica is hot and dry, it openeth and dissolucth obstructions, is an excellent cordiall against popson, and all infections, it helpeth the collicke, and cureth the biting of madde dogges or venemous beasts, it loueth a fruitfull dry mould, but may not endure the trouble of weedes, it is to be sowne in March or Aprill, & it flourisheth in July & August, it hath a sweet odour, and helpeth all euill & infected ayres.

Of Angellica.

Valerian is hot & dry and preuenteth infection, it helpeth fitches and other griefes proceeding from windy causes, it loueth to grow in moist and low places, the ground being well manured, and till it be shot at least a handfull high, it

Of Valerian.

Of Elecam-
pana.

it must be kept with continuall watering, the moystest time of the yeere is the best to sowe it in.

Elecampana, is hot and moyst, and good for offences in the lungs, or any outward ioynt, being troubled with paine proceeding from colde: it is better much to be set then sowne, yet notwithstanding it may safely enough be sowne at any time after mid-March, the ground being rich, soft, and loose, and the seede strowed very thinne, and at least two fingers distance one from another.

Of Pepper-
wort.

Pepperwort is hot and drye, yet of the two much more hot, it is good against all kinde of aches, and other paine in the ioynts, or sinewes: it delighteth in a rich blacke Soyle, fat and loose: it would be sowne in February, and removed in September.

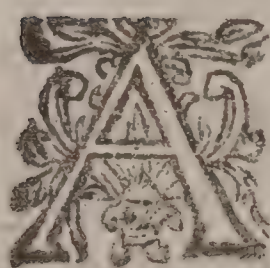
Of Philipen-
dula.

Philipendula is very hot and dry, and is good against abortiue births, Stone, Strangury, or any grieve proceeding from colde causes: it may be sowne in any barraine, stony, or grauelly Soyle, in the months of May, Aprill, or September: it neither desireth much weeding, nor much watering, but being once committed to the ground appeareth sodainely: and thus much of those Hearbes which are fit for Medicine, of which though there be many others, yet they differ not in their ordering from these already declared.

C H A P. V.

Of diuers sorts of Sallet-Hearbes, their manner of sowing and ordering.

Of Lettuce.



Amongst the many numbers of Sallet-Hearbes I thinke it not amisse to beginne first with Lettuce, which of all other whose vertue is helde in the leafe, is most delicate, tender, and pleasant: the ground then in which it most delighteth, is that which is most fertile, best laboured, and of the finest mould,

mould, being soft, loose, and more enclining to moisture then Orinelle: it may be sowne in any moneth of the yeare, from February to November; it is very quick of growth, and will appeare aboue the earth in foure dayes after the sowing: it would at first be sowne thicke, and carefully kept with morning and evening watrings, if the season be dry, but not otherwise: after it is growne and faire spread aboue the earth, which will be in a moneths space or thereabouts, you shall chuse out the fairest and goodliest plants, and taking them vp with the earth and all, about their rootes, replant or remoue them to a new bed of fresh mould, and there set them a fote distance one from another, and fixe their rootes fast and hard into the ground: then couer or presse them downe with Tyle or Slate stones, to make them spread and not spring upward, by which meanes the leaues will gather together, and cabbadge, in a thicke and good order, for it is to be vnderstood, that the oftner you remoue your Lettuce, the fairer and closer they wil cabbage. There be diuers which obserue to remoue Lettuce as soone as fixe leaues are sprung aboue the ground; but I like better to remoue them when they begin to spindle: they are most esteemed in the moneths of Aprill, May, and Iune, for in Iuly they are supposed to carrie in them a popsonous substance.

Next the Lettuce I preferre the hearbe Spynage, Of Spynage. which delighteth in a well-dunged earth, and may be sowne in Aprill, March, September, or October: it would not be mixed with other seedes, because it prospereth best alone.

Sparagus loveth in a fertill moist ground, the mould being made light which couers it, and the ground wel dunged, the Spring is the best time to sowe it, and it must be sowne in long furrowes or trenches made with your finger, and not vniuersally spread ouer the bed as other seedes are: it loueth moisture, but may not endure the wet to lye long vpon it, and therefore the beds would a little descend it: must not be remoued till the rootes be so fettered together,

together, that they hinder the new branches from springing vp, which commonly is two yeares.

Of Colworts.

Colworts oz Cabbage seeds delighteth in any well husbanded ground, and may be sown in all sorts and seasons as Lettuce is, and must also in the like manner be removed, after the principall leaues are come forth, which will make them to gather together, and cabbage the better: and as they may be sown in any season of the yeare, so likewise they may be removed at all seasons likewise, except the frost oz other vnseasonable weather hinder you: and although some men will not allow it to be sown in clay grounds, grauell, chalke, oz sand, yet they are deceived; for if the earth be well ordered, they will grow plentifully, onely you must obserue when you remove them to let them haue earth come enough.

Of Sage.

Sage is in Gardens most common, because it is most wholesome, and though it may be better set from the slip then sown in the seed, yet both will prosper, it loueth any well dressed ground, and may be sown either in February, March, September, oz October: it loueth also to grow thick and close together, and will of it selfe overcome most weeds: it asketh not much dung, neither too great care in watering, onely it would be oft searched, for Toades and other venomous things will delight to lye vnder it, the more Sunne and ayre it hath, the better it is.

Of Parslane.

Parslane is a most excellent Sallet herbe, and loueth a fertile soile, and though it may be sown almost in any month, yet the warmest is the best, as Aprill, May, Iune, oz Septemb. Buck ashes are an excellent measure for them, and for most Sallet hearbs else, but aboue all they loue dry dust and house-sweepings, they are apt to shed their seed, whence it comes that a ground once possessed of them will seldom want them, they may also be removed, and will prosper much the better.

Of Artichokes

Artichokes loue a fat earth, and may be sown in February oz March, the Moone encreasing, the seeds must not be sown together, but set one by one a good distance asunder;

asunder; they must lye somewhat deepe, and be firmly covered; yet if you can procure them, I rather wish you rather to set them from Slips or young Plants, then sow them from the seedes, for they doe so naturally loue the earth, that you can hardly slip so walt a leafe from an Artichoke as will not take roote; if you sow the seede, you must be carefull to weede and water them well, for the first leaues are very tender: also if you remoue them after their first springing, the fruit will be bigger and better.

Garlicke is best in September and Nouember, to be set from the clove, in & about the borders of beds, or other seedes, halfe a foote one from another, and in February, March, and Aprill, to be sown from the seede: it must be ordered as you order Onyon seede, it loues not much wet nor extreame drought, onely it desires a good mould which is rich and firme, yet not too much dunged.

Of Garlicke.

Raddish loueth a fertile ground, that is well dunged, chiefly with mans ordure, that is deepe trencht, and hath an easie and light mould, and the seedes would be placed either in rowes, or about the borders of beds, as you doe Garlicke: the manner of sowing it is with a dibble or round sticke, to make a hole into the ground almost a foote deepe, and then into that hole to put not aboue two seedes at the most, and then close the hole vp againe, and let the holes be foure fingers one from another, it may be sown in most months of the yere if the frost hinder not, and to make the roote large & tender, and to keepe the branch from seeding; you shall as it springs crop off the principall leaues which grow against the heart of the root: to tread them downe into the earth after they haue fast roote is good also.

Of Raddish.

Nauew, if the earth haue any small goodnesse in it will grow plentifully, neither is offended with any ayre, onely the mould would be loose and rough, for otherwise it many times turneth to Rape: the seede naturally cometh vp very thicke, therefore it is expedient to remoue them and plant them thinner, for that best preserueth their

Of Nauen.

natures, they may be sowne in February, March, Aprill, September, or October.

Of Parsneps
and Carrets.

Parsneps or Carrets are of one and the selfe nature, they delight in a good fat earth, and would be sowne reasonably thicke, in long deepe trenches like furrowes, hauing a gentle and easie mould either in the moneth of January, February, or March, or in September, October, or December, they must be carefully well weeded, and if the earth be fat, they neede not much watring or other attendance.

Of Pompy-
ons.

Pompyons, Gourds, or Mellons, desire a very good ground, or by Nature or Art, the seedes must be sowne very thinne, as at least halfe a foote one from another, they would lye reasonably deepe, yet the mould very gentle which couers them, they are subiect to spread and runne ouer much ground, therefore as they grow you must direct their stemmes, so as they may not annoy one another, and when they flower you shall lay broad Tiles or Slate stones vnder them, that the fruit nor flower may not touch the earth; if you plash them vp against trees or walles where they may haue the reflection of the Sunne, the fruit will be larger, pleasanter, and sooner ripe: they neede no weeding nor watring after you see them appeare aboue the earth, and the best seasons to sowe them in, is February, March, or Aprill, those are the best Pompyons which haue the smallest seedes, and are of the most yallowest complexion.

Of the Cow-
cumber.

Cowcumber, is a delicate, pleasant, yet very tender fruit, and delighteth in an extraordinarie fat earth, especially during the opening or sprouting of the seede, therefore the best and most vndoubted safest way for sowing them, is, first in some corner of your Kitchen garden to make a bed of two or thre yards square of olde Oredung, and Horse dung mixt together, and at least a yard or better high from the earth, then couer this bed of dung with the richest garden mould you haue, better then halfe a foote thicke: then thereon place your seedes halfe a foote likewise

one

one from another, and be most sure that your seedes be hard and sound (for any softnesse in them sheweth rottennesse) then couer them foure fingers thicke with the like mould: then within seauen or eight dayes, after you shall see them appeare aboue the earth, but in any wise let them continue still till the principall leaues be come forth, and they begin to creepe out in length, then with your hand griping the whole plant, take it vp by the rootes with the earth and all, and plant it in a bed new digged & trimmed for the purpose with a rich loose mould, and so replant and remoue each roote seuerally one after another, and they will grow and bring forth in great plenty. Now by the way you must obserue, that as soone as you haue sowne your seedes you shall prouide a Mat, Canuasse, or other couering, which being placed vpon stakes ouer the dung bed, shall euery night after Sunne-set be spread ouer the same, and not taken away till the Sunne be risen in the morning, for this will defend the seedes from frosts and other cold delues which are very dangerous. Now if any demand why these seedes are thus sowne first on the bed of dung, they shall vnderstand that besides the warmth and fertility thereof, that the seedes are so pleasant and tender, that wormes and other creeping things in the earth will destroy them befoze they can sprout, which this bed of dung preuenteth. The months most fit for sowing these seedes, are Aprill, May, and Iune onely, for other are much too colde, and in this manner you may sowe any tender seede whatsoeuer.

Beanes of Egypt delight in a moyst watrish ground, rather fertile then any way giuen to barraineesse, yet will plentifully enough prosper in any indifferent earth: they are rather to set then sowe, because they must take strong roote, and be fixed somewhat deepe into the earth, and the moneth which is most proper for them, is the latter end of January, all February and the beginning of March onely.

Skerrets are a delicate roote, white, tender, and pleasant, little differing in tast or excellencie from the Eringo.

Of the Beane
of Egypt.

Of Skerrets.

They delight in a rich mould, moyst and well broken, and must be set deepe in the earth: after they be a finger length aboue the ground they would be remoued, and planted in a fresh mould, which will preserve them from speedie sowing, for when they runne to seede, they lose the vertue of their roote. The moneths fittest for the sowing of them, is March, Aprill, and May, and if you desire to haue them all Winter, you may then sowe them in September and October. And thus much for Sallet-hearbs, and rootes of all natures, of which kindes though there be diuers other, yet you shall vnderstand, all are to be ordered in the manner of these before rehearsed, that is to say, such as haue their vertues in the stalke or leaues, like Spynage, Spargus, Purslayn, and such like, those which cabbadge or knit together in hard lumps, like Lettuce, Colworts, and such like, and those whose goodnesse liues in their rootes, like Raddish, Carrets, Skerrets, and such like.

A most necessary obseruation.

Now for a most necessarie obseruation, every Gardener ought to beare this rule in his memorie, that all Pot-hearbs must be sowne thicke, and but thinly couered, as namely not aboue three fingers: all hearbs which cabbadge must be sowne thicke, and deeper couered, as a full handfull at least, and in their remouing planted thinnely, and well firt into the earth: and all rootes must be sowne thinnely and deepe, as almost a fote either let into the ground, or strewed in deepe furrowes, digged and laide vp for the purpose, in which the quantity of your seede must onely direct you: for if you haue occasion to sow hardly a handfull, then you may set them one by one into the ground at your leasure, but if you haue occasion to sowe many Becks or halfe Becks, then you shall turne vp your earth into deepe furrowes, and in the bottome thereof scatter your seede, and after rake it into a leuell, and you shall not onely save much labour, but gaine your purpose.

CHAP. VI.

Of Flowers of all sorts both forraigne and home-bred,
their sowing, planting, and preserving.



Having written sufficiently of Pot-herbs and
Sallet-herbs, which are the ornaments of
the Husbandmans Kitchen or Table, I will
here speake of flowers, which either for their
smells, beauties, or both, are the graces of his Chamber.
And first, because my maine ayme and scope is English
Husbandrie, I will begin with those flowers which are
most proper and naturall for our climate, of which because
I holde Roses both for their smell, beauties, and whole
somnesse to exceede all other, I thinke it not amisse to giue
them the first place and precedencie before all other.

You shall vnderstand then that Roses are generally and
aunciently but of three kindes, the Damaske, the red, and
the white, and what are different from these are but de-
rivations from them, being by grafting, replanting, and
phisicking, somewhat altered either in colour, smell, or
doublenesse of leafe.

Of Roses.

To speake then first of the Damaske Rose, it is fit that
all husbandmen know, that Roses may as well be sowne
from the seede, as planted from the roote, *Byen*, or by anch
onely, they are the flower in comming by, more tender to
nourish, and much longer in yelding forth their flowers,
yet for satisfaction sake and where necessitie vrgeth, if of
force or pleasure you must sowe it from the seede, you shall
chuse a ruffish earth loose and well dunged, and you shall
cast by your beds high and narrow: the moneth which is
fit for their sowing is September, and they must be coue-
red not above foure fingers deepe, they must be defended
well all the Winter from frosts and stormes, and then
they will beare their flowers plentifully all the next
Spring.

Of the Da-
maske Rose.

Spring following; yet this is to be noted, that all Roses which rise from the seede simply, their flowers will be single like the Eglantine, or Cyphanie, therefore after your plants are two yeeres olde, you must graft one into another, as you doe other fruit, and that will make them double and thicke: also you must remember that those yellow small seedes which are in the midst of the Rose, are not true Rose seedes, but those which lye hid in the round peare knob vnder the Rose, which as soone as the leaues are fallen away, will open and shew the seede. And thus much touching the sowing of all sorts of Roses, which is for experience and knowledge sake onely, for indeede the true vse and property of the Rose is to be planted in short slips about fourtene inches long, and the small tassels of the roote cut away, they would be set halfe a fote into the ground, in the same manner as you set ordinary Quickset, and of like thicknesse, rather a little slope-wise then vp-right: and though some thinke March the best season, yet doubtlesse September is much better for hauing the roote confirmed all the Winter, they will beare the sooner and better all the Sommer following; you must be careful to plant them in faire weather, and as nere as you can vnder shelter as by the sides of walls, and such like conuert where the Sunne may reflect against them, and if they be planted on open beds or borders, then you must with poles and other necessities support and hold them vp, least the winde shake their rootes and hinder their growing.

Of the red
Rose.

The red Rose is not fully so tender as the Damaske, neither is it so pleasant in smell, nor doubleth his leaues so often; yet it is much more phisicall, and oftner vsed in medicine, it is likewise fitter to be planted then sown, and the earth in which it most ioyleth would be a little rough or grauelly, and the best compasse you can lay vnto it, is rubbish, or the sweeping of houses, the moneths to loue or plant it in is March or September, & the time to prune and cut away the superfluous branches is ever the midst of October.

The

The white Rose is of lesse smell then the red, and will grow in a harder ground, his vse is altogether in Physicke as for soze eyes and such like: it will grow into a Tree of some bigge substance, and is seldome hurt with frosts, stormes, or blastings: it would likewise be planted from the roote against some high wall, either in the moneth of February or March, and the oftner you plant and replant it, the doubler and larger the flower will be: for the earth it much skilleth not, because it will grow almost in euery ground, onely it delights most in the shade, and would be seldome pruned, except you finde many dead branches.

Of the white
Rose.

The Cinamon Rose, is for the most part sown, and not planted, whence it comes that you shall euer see the leaues single and little, the delicacie thereof being onely in the smell, which that you may haue most fragrant and strong, you shall take a vessel of earth, being full of small holes in the bottome and sides, and fill it with the richest earth you can get, being made fine and loose, then take Damascie Rose seedes which are hard, and sound, and steepe them foure and twenty houres in Cinamon water, I doe not meane the distilled water, but faire Conduit water, in which good store of Cinamon hath bin steeped, or boyled, or milke, which in good store of Cinamon hath bin dissolved, and then scow those seedes into the Pot, and couer them almost three fingers deepe, then morning and eueing till they appeare aboue the earth, water them with that water or milke in which the seedes were steeped, then when they are sprung vp a handfull or more aboue the ground, you shall take them up mould and all, and hauing dressed a border or bed for the purpose, plant them so as they may grow vp against some warme wall or pale, and haue the Sunne most part of the day shining vpon them, and you shall be sure to haue Roses growing on them, whose smell will be wonderfull pleasant, as if they had bene spiced with Cinamon, and the best season of sowing these is euer in March, at high noone day, the weather shining faire, and the winde most calme.

Of the Cinnamon
Rose.

To make the
Cinamon Rose
grow double.

Now if you would haue these Roses to grow double, which is an Art yet hid from most Gardners, you shall at Michaelmasse take the vppermost parts of the Plants from the first knot, and as you graft either Plumme or Apple, so graft one into another, and couer the heads with earth or clay tempered with Cinamon-water, and they will not onely grow double, but the smell will be much sweeter, and looke how oft you will graft and re-graft them, so much more double and double they will proue.

Of the Pro-
uince Rose.

The Province Rose is a delicate flower for the eye more then the nose, for his oft grafting abateth his smell, but doubleth his leafe so oft that it is wonderfull; therefore if you will haue them large and faire, you shall take the fairest Damaske Roses you can get, and graft them into the red Rose, and when they haue shot out many branches, then you shall graft each seuerall branch againe with new grafts of another grafted Damaske Rose: and thus by grafting graft vpon graft, you shall haue as faire and well coloured Province Roses, as you can wish or desire: and thus you may doe either in the Spring or fall at your pleasure, but the fall of the leafe is euer helde the best season.

To make Ro-
ses smell well.

Now if your Roses chaunce to lose their smells, as it oft happeneth through these double graftings: you shall then plant Garlick heads at the rootes of your Roses, and that will bring the pleasantnesse of their sent vnto them againe.

Generall notes
touching Ro-
ses.

Now for your generall obseruations, you shall remember that it is good to water your Roses morning and euening till they be gathered; you shall rather chuse to plant your Roses in a dry ground then a wette; you shall giue them much shelter, strong support, and fresh dung twice at the least euery yeare, when the leafe is fallen, you shall cutte and prune the branches, and when the buds appeare you, then begin your first watering.

Laender

Laucender is a flower of a hot smell, and is moze esteemed of the plaine Country housewife then the Dainty Citizen: it is very wholesome amongst linnen cloathes, and would be sown in a good rich mould, in the moneths of March or April.

Of Laucender.

The white Lilly would be sown in a fat earth, in the moneths of October and November, or in March or April, and the seedes must be sown exceeding thinne, not one by any meanes touching another, and the mould which covereth them must be sifted gently vpon them.

Of the white Lilly.

If you would haue your Lillyes of a purple colour, you shall steepe your seedes in the Lees of red wine, and that will change their complexion, and also you shall water the Plants with the same Lees likewise: if you will haue them scarlet red, you shall put Vermillion or Cynaber betwene the rinde and the small heads growing about the roote: if you would haue them blew, you shall dissolve Azure or Bysc betwene the rinde and the heads, if yellowe Orpment, if Greene Verdigreace, and thus of any other colour.

To make Lillyes of any colour.

Now to make them flourish every moneth in the yere, you shall sowe your seedes some a fote deepe, some halfe a fote, and some not two inches, so they will spring one after another, and flourish one after another.

To make Lillyes flourish all the yere.

The wood Lilly or Lilly of the vale, delighteth most in a moist ground, and may be sown either in March or September, it is very faire to looke on, and not so suffocating in smell as the other Lillyes are.

Of the wood Lilly.

The flower de Lice is of excellent beauty, but not very pleasant to smell to, it loueth a dry ground & an easie mould, and is fittest to be sown in the moneth of March.

Of the flower de Lice.

Pyonie or the blessed Rose, loueth a good fat earth being somewhat loose, and may be sown either in March or September, it asketh not much watering, onely some support because the stalkes be weake.

Of Pyonie.

Petillius or Indian eye, may be sown in any ground, for it desireth neither much water, nor much dung, and

Of Petillius.

the best season for sowing, it is June or September, for it will beare flowers commonly all the Winter.

Of Veluet
flower.

Veluet flower loveth a rich fertile ground, and must be much watered: the season best for the sowing is August, for commonly it will beare flowers all the Winter.

Of Gylliflow-
ers.

Gill-flowers are of diuers kinds, as Pynks, Wall-flowers, Carnations, Cloue-Gillflowers, and a world of others, which are of all other flowers most sweet and delicate: all but the Wall-gill-flower loue good fertile earths, and may be sown either in March, July, or August. They are better to be planted of Slips then sown, yet both will prosper. They are very tender, and therfore the best planting of them is in earthen Pots, or halfe Tubbs, which at your pleasure you may remoue from the Shade to the Sunne, and from the roughnesse of stonnes to places of shelter, they grow vp high on long slender stalkes, which you must defend and support with square cradles made of sticke, least the winde and the waight of the flowers breake them: these Gillflowers you may make of any colour you please, in such sort as is shewed you for the colouring of Lillyes, and if you please to haue them of mixt colours you may also, by grafting of contrary colours one into another: and you may with as great ease graft the Gyllflower as any fruit whatsoeuer, by the ioyning of the knots one into another, and then wrapping them about with a little soft leau's sike, and couering the place close with soft red Ware well tempered. And you shall vnderstand that the grafting of Gyllflowers maketh them exceeding great, double, and most orient of colour.

Of grafting of
Gyllflowers.

Of the smells
of Gyllflow-
ers.

Now if you will haue your Gyllflowers of diuers smells or odours, you may also with great ease, as thus for example: if you will take two or three great cloues, & keepe them foure and twenty houres in Damaske Rose water, then take them out and bruiſe them, and put them into a fine Cambricke ragge, and so binde them about the heart roote of the Gyllflower, neere to the setting on of the stalke, and so plant it in a fine, soft, and fertile mould, and the flower

flower which springeth from the same, will haue so delicate a mixt smell of the Clove and the Rose-water, that it will breede both delight and wonder. If in the same manner you take a sticke of Cinamon, and steepe it in Rose water, and then bruse it, and binde it as aforesaid, all the flowers will smell strongly of Cinamon: if you take two graines of fat Muske, and mixe it with two drops of Damaske Rose water, and binde it as aforesaid, the flowers will smell strongly of Muske, yet not too hot nor offensive, by reason of the correction of the Rose water: and in this sort you may doe either with Amber-greece, Storax, Benjamin, or any other sweet drugges whatsoeuer; and if in any of these confectiōs before named, you steepe the seedes of your Gylliflowers foure and twenty houres before you sow them, they will take the same smells in which you steepe them, onely they will not be so large or double, as those which are replanted or grafted.

Now for your Wall Gylliflower, it delighteth in hard rubbish, limy, and stonie grounds whence it cometh that they couet most to grow vpon walles, pauements, and such like barraine places. It may be sown in any moneth or season, for it is a seede of that hardnesse, that it makes no difference betwixt Winter and Sommer, but will flourish in both equally, and beareth his flowers all the yere, whence it comes that the Husbandman preserues it most in his Bee-garden; for it is wondrous sweet, and affordeth much honey. It would be sown in very small quantity, for after it haue once taken roote, it will naturally of it selfe ouer-spread much ground, and hardly euer after be rooted out. It is of it selfe of so exceeding a strong and sweet smell, that it cannot be forced to take any other, and therefore is euer preserued in its owne nature.

Of the Wall
Gylliflower.

The Helytropian or flower of the Sunne, is in nature and colour like our English Marigold, onely it is exceeding huge in compasse, for many of them will be twenty, and foure and twenty inches in compasse, according to the fertilityenesse of the soyle in which they grow, and the oft re-

Of the Hely-
tropian.

planting of their rootes, they are exceeding goodly to looke on, and pleasant to smell, they open their flowers at the rising of the Sunne, and close them againe at the Sunne setting, it delighteth in any soyle which is fertile either by Art or Nature, and may be sown in any moneth from February till September, the oft planting and replanting of the roote after it is sprung a handfull from the earth, maketh it grow to the uttermost bignesse, it would haue the East and West open vpon it, onely some small Pent-house to keepe the sharpnesse of the winde from it.

Of the Crown
Emperiall.

The Crowne Emperiall, is of all flowers both Forraigne and home-bred, the delicatest and strangest: it hath the true shape of an Emperiall Crowne, and will be of diuers colours, according to the Art of the Gardener. In the midst of the flower you shall see a round Pearle stand, in proportion, colour, and orientnesse, like a true naturall Pearle, onely it is of a soft liquid substance: This Pearle if you shake the flower neuer so violently will not fall off, neither if you let it continue neuer so long, will it either encrease or diminish in the bignesse, but remayneth all one: yet if with your finger you take and wipe it away, in lesse then an houre after you shall haue another arise in the same place, and of the same bignesse. This Pearle if you taste it vpon your tongue, is pleasant and sweet like honey: this flower when the Sunne ariseth, you shall see it looke directly to the East, with the stalke bent lowe therevnto, and as the Sunne ariseth higher and higher, so the flower will likewise ascend, and when the Sunne is come into the Meridian or noone point, which is directly ouer it, then will it stand vp right vpon the stalke, and looke directly vprward, and as the Sunne declineth, so will it likewise decline, and at the Sunne setting looke directly to the West onely. The seedes of this flower are very tender, and therefore would be carefully sown in a very rich and fertile earth well broken and manured. The seasons
: most

most mete for the same, is the latter end of March, Aprill, or May, for the flowers flourish most in May, June, and July. As soone as it is sprung a handfull above the earth; you shall remoue it into a fresh mould, and that will make it flourish the braver: the roote of this flower is like an Apple, or great flat Onion, and therefore in the replanting of it, you must be carefull to make a hole large and fitte for the same, and to fire the mould gently and close about the same. In the Winter it shrinketh into the earth, and is hardly or not at all discerned, by meanes whereof I haue seene diuers supposing it to be dead, to digge vp the earth, and negligently spoyle the roote, but be not you of that opinion, and in the Spring you shall see it arise and flourish bravely.

The Dulippo is but a little short of the Crowne Of the Dulippo. Emperiall in pleasantnesse and rarenesse, for you may haue them of all colours whatsoeuer, in such sort as was shewed you for the Lillyes, Gylliflowers, and other rootes: they are tender at their first springing from the seede, and therefore must be sown in a fine rich mould, in the warmth of the Sunne, either in March, Aprill, or May: but after they are once sprung above the ground, they are reasonable hard, and will defend themselves against most weathers: the roote of this flower is shaped like a Peare, with the biggest end downward, and many small threds at the bottom; therefore you must be sure when you remoue or replant it, to couer all the roote in fresh mould, and let not any part of the white thereof be vncouered: this flower by monethly replanting, you may haue to flourish in all the Summer moneths of the yeare, for in the dead of Winter it shrinketh into the ground, and is hardly or not at all perceived, the stalkes of these flowers are weake, therefore to support them, and defend them from the shakings of the winds with little

little square frames of sticke, will be very good and necessary, it must be oft watered.

Of the Hyacinth.

The Hyacinth is a flower more delicate to the eye then nose, and is of a good strong nature, for it will endure any reasonable earth, and may be sowne in any moneth of the Spring, from the beginning of February till midde June: it onely hateth tempests and stormes, and therefore is commonly sowne or planted nere unto walls or other shelter. You may haue them of any colour you please, as is shewed before of other flowers, and in this alteration or mixture of colours their greatest glorie appeareth, they will flourish all the Summer long, and if they stand warme, appeare very early in the Spring.

Of the Narcissus.

The Narcissus is a very curious and dainty flower, and through his much variety and alteration in growing, they are supposed to be of diuers kinds, but it is not so; for in as much as they are seene to be of diuers colours, that is but the Art of the Gardener, as is before exprest in other flowers, and whereas some of them grow single, some double, and some double vpon double, you shall vnderstand that such as grow single, grow simply from the seede onely, those which are double and no more, are such as haue bene planted and replanted, the small threds of the rootes being clipt away, and nothing left about it that is superfluous, and those which are double vpon double, are the double plants grafted one into another. This Narcissus loueth a rich warme soyle, the mould being easie and light, it may be sowne in any moneth of the Spring, and will flourish all the Summer after. Before it appeare aboue ground it would be oft watered, but after it shal not how little, for it will defend it selfe sufficiently.

Of the Daffadill, Colombine, and Chesbole.

Not vnlike vnto this is your Daffadill of all kinds and colours, and in the same earths and seasons delighteth either to be sowne or planted, and will in the same manner as your Narcissus double and redouble his leaues; so will your Colombine, your Chesbole, and almost any hollow flower whatsoever. Many other forraigne flowers there are

are which grow plentifully in our Kingdome: but the order of their planting and sowing differeth nothing from these which I have already declared, being the most tender and curious of all other, therefore I will end this Chapter with this one caution onely, that when you shall receive any seede from any forraine Nation, you shall learne as nere as you can the nature of the soyle from whence it cometh, as hot, moyst, colde, or dry it is, and then comparing it with ours, sow it as nere as you can in the earth, and in the seasons that are nearest to the soyle from whence it came, as thus for example: if it came from a clime much hotter then ours, then shall you sow it in sandie mould or other mould made warme by strength of measure, in the warmest time of the day, and in those moneths of the Spring, which are warmest, as Aprill or May, you shall let it have the Sunne freely all the day and at night, with Mats, Wenthouse, or other defence shield it from sharpe windes, frosts, or colde dewes.

An excellent
Caution.

I have seene diuers Noblemen and Gentlemen, which have bene very curious in these dainty flowers, which have made large frames of wood with boards of twenty inches deepe, standing vpon little round wheeles of wood, which being made square or round according to the Masters fancie, they have filled with choyse earth, such as is most proper to the flower they would have grow, and then in them sow their seedes, or set their Plants in such sort, as hath bene before described, and so placing them in such open places of the Garden, where they may have the strength and violence of the Sunnes heate all the day, and the comfort of such moderate showers, as fall without violence or extraordinarie beating, and at night draw them by mans strength into some low vaulted gallery opening vpon the Garden, where they may stand warme and safe from stormes, windes, frosts, dewes, blastings, and other mischiefes which cuer happen in the Sunnes absence, and in this manner you may not onely have all manner of dainty outlandish flowers, but also all sorts of

A new manner of planting flowers and fruits.

the most delicateſt fruits that may be, as the Orenge, Li-
mond, Pomgranate, Poncythron, Cynamon-tree, Oliue,
Almond, or any other, from what clime ſo euer it be de-
riued, obſeruing onely but to make your frames of wood,
which containes your earth, but deeper and larger, accor-
ding to the fruit you plant in it, and that your Alleys
through which you draw your Trees when you houſe
them be ſmooth and leuell, leaſt being rough and breuen,
you fogge and ſhake the rootes with the waight of the
Trees, which is dangerous. And leaſt any man may ima-
gine this but an imaginary ſuppoſition, I can aſſure him
that within ſeauen miles of London, the experiment is to
be ſcene, where all theſe fruits and flowers with a world
of others grow in two Gardens moſt abundantly. Now
for ſuch flowers or fruits as ſhall be brought from a colder
or more barraine ground then our owne, there needeth
not much curioſity in the plantation of them, becauſe a
better euer bringeth forth a better encrease, onely I would
wiſh you to obſerue, to giue all ſuch fruits or flowers the
uttermoſt liberty of the weather, & rather to adde coolenes
by ſhadow, then encrease any warmth by reflection, as
alſo to augment ſhowers by artificiall watrings, rather
then to let the roote dry for want of continuall moyſture;
many other notes and obſervations there are, which to
diſcouer, would aſke a volume larger then I intend, and
yet not be more in true ſubſtance, then this which is al-
ready writ, if the Reader haue but ſo much mother-wit,
as by comparing things together, to draw the uſes from
the true reaſons, and to ſhunne contrary by contraries,
which what Houſbandman is ſo ſimple, but he can eaſily
performe, and having the true grounds of experience, frame
his deſcant according to his owne fancie, which is a Mu-
ſicke beſt pleaſing to all men, ſince it is not in any one
mans power to giue a generall contentment. And thus
much for flowers, and their generall and particular orde-
ring.

CHAP. VII.

How to preserve all manner of seedes, hearbs, flowers, and fruits, from all manner of noysome and pestilent things which deuoure and hurt them.



It is not enough to bequeath and giue your seedes vnto the ground, and then immediatly to expect (without any further industrie) the fruit of your labours, no goodnesse seldome cometh with such ease: you must therefore know that when you lay your seedes in the ground, they are like so many good men amongst a world of wicked ones, and as it were inuironed and begirt with maine Armies of enemies, from which if your care and diligence doe not defend them the most, if not all, will doubtlesse perish, and of these enemies the worst and most violentest is Thunder and Lightning, which in a moment killeth all sorts of flowers, plants, and trees, even in the height and pride of their flourishing, which to prevent, it hath bene the practise of all the auncient Gardeners, to plant against the walles of their Gardens, or in the midst of their quarters, where their choyssest flowers grow, the Lawrell or Bay Tree, which is euer helde a defence against those strikings.

Of Thunder
and Light-
ning.

Next vnto Thunder and Lightning are Caterpillers, which are a kinde of filthy little wormes, which lye in Cobwebs about the leaues, deuouring them, and poisoning the sap, in such sort, that the Plant dieth speedily after: the way to kill these, is to take strong Urine and Ashes mixt together, and with it to dash and sprinkle all the Plants cleane ouer, and it will both prevent their breeding, or being bred will kill them: the smoake of Brimstone will doe the like, yet if they be exceeding much abundant, the surest way to destroy them, is to take olde, rotten,

Of Cater-
pillers.

mouldy Hay, and setting it on fire, with the blaze thereof burne the Cobwebs, and then with the smoake smother and kill the wormes, and they will hardly ever breede in that place againe.

Of Toades
and Frogges.

Next these are Toades and Frogges, which are very poisonous and great destroyers of young Plants, chiefly in their first appearing about the ground, and the ancient Carriers haue bled to destroy them by burning the fat of a Stagge in some part of the Garden beds, from which earth all creatures that haue poison in them, will flye with all violence: other Gardeners will watch where the Wite pearcheth on nights, and gathering vp her dung, scatter it vpon the beds either simply, or mixt with the shavings of an olde Harts horne, and no venomous thing will come nere it.

Of the field
Myce.

Next these are field Myce, which will roote seedes out of the earth, and deuoure them abundantly, which to kill you shall take Henbane seede, and beate it to powder, and then mixing it with sweet Oyle, fresh Butter, or Grease, make thereof a bayte; and when you finde where they scratch or roote, lay some part of the bayte in that place, and they will greedily eate it, and it will kill them: there be other Gardeners which will take a Weesell, and burning it to ashes, scatter the ashes on the beds, and then no field Mouse will come nere them.

Of Flyes:

Next these are Flyes, as flesh-Flyes, Scarabs, Hornets, Dorees, and such like, which are great destroyers of Seedes and Plants, when they appeare in their first lease, and are soft and tender, which to destroy, you shall either take Orpment mixt with milke, or the powder of Allome, or the ashes of any of these Flyes burnt, and with it sprinkle your beds and young plants all ouer, and it will keepe Flyes that they will not dare to come nere them.

Of the greene
Fly.

If the greene Fly, which of all other Flyes is most greedy to hurt Seedes and Plants, doe offend your Garden, you shall take Henbane leaues, Houselecke, and Mints, and beat them in a Morter, then straine forth the iuyce, and

and then adde thereto as much Vinegar as was of all the rest, and th. re. with sprinkle your beds all ouer, and the Greene Fly will neuer come nere them. Some hold opinion, that if you plant the hearbe Roker in your Garden, that it is a safe preseruatiue against these Greene Flyes, for it is most certaine that the very smell thereof will kill these, and most sorts of all other Flyes whatsoever, as hath bene found by approued experience, and the spits of olde auncient Abby Gardens, which a man shall seldome finde without this hearbe planted in them.

Next these are Gnats, which although it be the smallest of all Flyes, yet it is the greatest, quickest, and sharpest deuourer of tender Plants of all other, for it biteth deeper and more venomously sharpe, then those which are of much bigger substance: the best way to destroy them is morning and eueing, to smoake and perfume your beds either with wet Rosemary, or with mouldy Hay: some vse to burne Calamint, and some Dre dung, and sure all are very good, for the smoakes are very sharpe, and styfle as soone as it is receiued. Of Gnats.

Next these are Pismyers, which also are very noysome vnto Gardens, for they will digge vp, and carrie away the smaller seedes to their hills, and in short space spoyle and deface a bed of his encrease, and the best way to destroy them, is, if you finde their hill, to poure hot scalding water vpon them: or if vpon your Garden beds you strowe Ashes or Lym, but especially that which is made of chalk, they will by no meanes come nere them, as you shall finde by experience. Of Pismyers.

Next these are Moales, which digging and vndermining the earth, turneth vp Seedes and Plants in a confused fashion, to the bitter destruction and ruine of the Husband-mans labour, the cure whereof is to take them in such sort, as shall be shewed in this Booke, where I speake of Pasture grounds; but if you finde that their encrease and continuance multiply with your labour, it shall be then good for you to plant in diuers places of your Garden Of Moales.

the hearbe called Palma christi, in other places Garlickes, and in other places Onyons, and it is an assured rule that no Moale will come nere where they grow for the strength and violence of their smell, is poysonous and deadly to those blinde vermines.

Of Snailles.

Nert these are Snailles of both kindes, blacke and white, which are as much offensive to Gardens, as any other crawling thing, for they feed of the tender leaues of plants, and of the outmost rindes of the daintiest hearbs or flowers, the way to destroy them, is to sprinkle upon the beds and other places of their aboad good store of chimney soote, which by no meanes they can endure, because it is mortall and poysonous.

Of Moathes.

Nert these are Moathes or Moaghts, which are very pernicious in a Garden, for they destroy both Seeds and Plants, and there is no better or more certaine way to kill them, then by taking olde horse hooes, and burning them, with the smoake thereof to perfume all the places where they abide, and it will in an instant kill them; with this smoake onely you may keepe Arras hanging, Tapistrie, Needleworke, Cushions, or Carpets, or any woollen cloath or garment whatsoever safe from Moathes as long as you please, neither neede you to vse it aboue once or twice a yeere at the most, as shall be more at large in another place declared.

Of Cankers.

Nert these are Cankers, which are a kinde of filthy woymes, which deuoure both the great and small leaues of all sorts of sweet Plants, especially Lettuce, Cabbage, Colafloours, and such like; and the way to destroy them, is to scatter amongst your Plants, Gorse-dung, or to sprinkle the iuyce thereof with a wispe of Rue, or hearbe of Grace ouer all the beds, and though some with a rustie knife vse to scrape them from the leaues, and so kill them on a Tyle, or lead, yet for my part I hold this the nurer way, and both more certaine and more easie, as experience will approue.

Lastly, are your Garden Wormes which liuing in the hollowe

hollowes of the earth feede much vpon your tender Garden seedes, and the soft sprouts which first issue from them, especially from all sorts of kirkels, in which they delight more then in any other feede whatsoener, as you may finde by experience, if you please to obserue accidents as they happen, without which obseruation you shall hardly attaine to the perfection of an excellent Gardener: for if you please to make this triall, take the kirkels of a faire sound Pippin, and deuide them into two parts, then sow the one halfe in a Garden bed well drest and trimmed for the purpose, where the worme hath liberty to come and goe at his pleasure, sowe the other halfe in some riuen boule, earthen pot, or halfe Tub, made for the purpose with the same earth or mould that the bed is, and then set the vessel so as no worme may come there vnto, and you shall finde that all those Seedes will sprout and come forth, when hardly any one of those in the bed of earth will or can prosper, there being no other reason but the extreame greedinesse of the deuouring worme, which to prevent, you shall take Dre dung, and burne it to ashes, then mixe them with the earth where with you couer your Seedes, and it will both kill the wormes, and make the Seedes sprout both sooner and safer. And thus much for the preservation of Seedes and Plants, from all noysome and pestilent creatures, which being practised with care and diligence, will giue vnto euery honest minde the satisfaction he desireth.

Now to conclude this small tract or Treatise of the Husbandmans Kitchen Garden, I would haue euery honest Reader vnderstand, that I haue not taken vpon me to modell out any curious shape or proportion, but onely figured out a perfect nourcerie, shewing you how to breed and bring vp all things fit for health or recreation which being once brought to mature and ripe age, you may dispose into those proper places which may become their worthinesse, in which worke I would haue your owne fancy your owne

Directour,

Of Garden
Wormes.

An excellent
experiment.

The conclusi-
on of the Kit-
chen Garden.

directour, for I may giue preheminnce to that you least like, and dilesteeme that most which to you may seeme most worthy, therefore let your owne iudgement order your Garden, like your house, and your heards like your furniture, placing the best in the best places, & such as are most conspicuous, and the rest according to their dignities in more inferiour rooms, remembering that your galleries, great chambers, and lodgings of state doe deserue Arras, your Hall Wainscote, and your meanest offices some Boscadge, or cleanly painting: from this alligorie if you can draw any wit, you may finde without my further instruction how to frame Gardens of all sorts to your owne contentment.

THE



THE SECOND PART OF THE SECOND BOOKE

of the *English Husbandman* : Contayning
the ordering of all sorts of VVoods, and
the breeding of Cattell.

CHAP. I.

Of the beginning of Woods, first sowing, and necessa-
rie vse.



Tis a Maxime held in Plantations,
that no land is habitable, which hath
not Wood & Water, they two being
as it were the only nerues & strength
of a mans safe and wholesome living,
and I haue heard many wise Gen-
tlemen, exercised, and ingaged, in the
most noble and euer laudable workes of our new Planta-
tions, both of Virginia and the Summer-Ilands affirme,
that they had rather, for a generall profit, haue a fertile
wholesome land, with much wood, then (wanting wood)
with a Mine of gold : so infinite great is the vse of Tim-
ber (whose particulars I neede not rehearse) and so insuf-
ferable is the want, when we are any way pinched with
the same. And hence it springeth that our olde auncestors
(whose vertues would God we would in some small mea-
sure

Wood better
then Gold.

sure imitate) when they found any hard and barren
 earth, such as was vnapt for grasse, or at least such as bare
 but grasse that would keepe life, not comfort life, they pre-
 sently plowed it vp, and sowed thereon Acornes, Ash-
 keyes, Maple knots, Birch apples, Hawes, Sloes,
 Nuts, Bullis, and all other seeds of trees in innumerable
 quantity, as may appeare by the Forrests of Del la mere,
 Sherwood, Kings wood, and many other within this king-
 dome of huge great spaciousnes and compasse, from whom
 when the wood is spoiled, the soyle serueth to little or no
 purpose, except it be the keeping alive of a few poore sheepe,
 which yeeld but little profit more then their carkasse.
 Thus euen from the first age of the world hath our fore-
 fathers bene euer most carefull to preserve and encrease
 wood, and for mine owne part I haue euer obserued in all
 those places where I haue scene Woods decayed and de-
 stroyed, that the charge of stubbing and other necessities
 allowed; those lands haue neuer againe yeilded the for-
 mer profit, for the greatest exhaustion that euer I saw
 of wood ground was to bring it to tenne shillings an Acre
 when it was conuerted to pasture, and being kept to wood,
 it was worth euery seauententh yeere one and twenty
 pound. A simple Auditor may cast the account of this pro-
 fit, but such is our greedinesse, that for our instant vse we
 little respect the good of ours, or our neighbours: But
 it is no part of my Bookes method to call offenders to que-
 stion, but onely to right the Husbandman in his journey
 to ordinarie profit. Know then that there is nothing more
 profitable to the Husbandman, then the encreasing and
 nourishing of wood; from whence (as our common lawes
 termes it) springs these three bootes or necessary commo-
 dities, to wit House-woode, Plow-woode, and Fire-woode,
 without the first we haue neither health, conuert, ease, nor
 safety from sauage beasts: without the second we cannot
 haue the fruits of the earth, nor sustenance for our bodies,
 nor without the last can we defend off the sharp Winters,
 or maintaine life against the numbing colds which would
 confound

The excellent
 vses of Wood.

confound vs. The consideration of these three things only, might enduce vs to the preservation of this most excellent commodity: but the other infinite necessities & uses which we make of wood, as shipping, by which we make our selves Lords of the Seas: fencing which is the bond of concord amongst neighbours: solution & trial of Mines, from whence springs both our glory in peace, and our strength in warre, with a world of others suitable unto them, should be motives irresistable to make vs with all diligence hark to the most praise-worthy labour of planting wood, in every place and corner, where it may any way conveniently be received.

If then the Husbandman shall live in a high baraine Countrey (for low valleyes, marshes, or such grounds as are subject to inundations, seldome nourish wood well) or in a soyle though not utterly baraine, yet of so hard and sower encrease, that the hearbage doth in the profit but in small quantity, I would wish him after a generall triall of his earth, to deuide it into three equall parts, the first and the fruitfullest I would haue him prelerue for pasture for his Cattell of all kindes: the second and next in fertility for corne, being no more then those cattell may till, and the last & most baraine to imploy for wood: which though he stay long for the profit, yet will pay the interest double. And this ground thus chosen for wood, I would haue him plowe vp from the swarth about the latter end of February, and if it be light earth, as either sand, grauell, or a mixt hazel earth, then immediately to sow it with Acornes, Ash-kepes, Elm & Maple knots, Beech-apples, Chestnuts, Ceruilles, Crabs, Peares, Nuts of all kindes, Hawes, Hips, Bullice, Sloves, and all manner of other wood seeds whatsoever, and as soone as they are sowne with strong Dre harrowes of iron, to harrow and breake the earth, in such sort, that they may be close and safely couered. And in the plowing of this earth, you must diligently obserue to turne vp your furrowes as deepe as is possible, that the seed taking strong and deepe roote, may the better

The plantation
of Wood.

and with moze safety encrease, and defend it selfe against stormes and tempests, whereas if the roote be but weakely fired, the smallest blasts will shake the Trees, and make them crooked, wythen, and for small vse but fire onely.

The fencing of
young woods.

After you haue harrowed your earth, and laide your seede safe, you shall fence your ground about with a strong and large fence, as hedge, ditch, pale, or such like, which may keepe out all manner of foure-footed beasts, for coming within the same, for the space of tennē yēeres after: for you shall vnderstand, that if any cattell shall come where young wood is peeping aboue the earth, or whilst it is young, tender, and soft, they will naturally crop and brouse vpon the same, and then be sure that the wood which is so bitten, will neuer prosper or spring vp to any height, but turne to bushie shrubs and ill-fauoured tufts, pestring the ground without any hope of profit, whereas if it be defended and kept safe the space of tennē yēeres at the least, it will after defend it selfe, and prosper in despight of any iniurie: and then after that date you may safely turne your cattell into the same, and let them graze at pleasure, and surely you shall finde it a great reliefe for your young beast, as your pearling Haiffers, Bullocks, Colts, Fillies, and such like: for I would not wish you to let any elder cattell come within the same, because the grasse though it be long, yet it is sower and scowring, and by that meanes will make your cattell for labour weake and vnyalthie, whether it be Tre or Horse, and for milch-kine, it will instantly dry vp their milke, but for idle hilding beasts, whose profit is coming after, it will serue sufficiently.

When cattell
may graze in
Springs.

The vse of the
clay ground
for Wood.

Now if the earth whercom you sowe your wood, be a stiff clay ground, and onely barraine through the extremitie of colde, wet, or such like, as is seene in daily experience: you shall then plowe vp the ground at the end of Ianuarie in deepe furrowes, as is befoze rehearsed; and then let it rest till it haue receiued two or thre good frosts, then after those frosts some wet, as either snow or raine, and


and then the next faire season after sowe it, as afoze-said, and harrow it, and you shall see the mould breake and couer most kindely, which without this baite, and order, it would not doe, then fence it as afoze-said, and prelerue it from cattell for tenne yeres after.

And here is to be noted that one Dake growing vpon a clay ground, is worth any flue which growes vpon the sand, for it is more hard, more tough, and of much longer indurance, not so apt to teare, ryue, or consume, either with Lynne, Rubbish, or any casuall moysture, whence it comes that euer your Shipwrights or Millwrights desire the clay Dake for their vse, and the Joyner the sand Dake for smoothnesse and waynscote. And thus much for the sowing of Wood, and his generall vses.

A speciall note.

CHAP. II.

The deuision of vnder-Woods, their sale, and profit.

 Hosoever be a Lord or Master of much vnderwood, which is indeede young spring-wood of all kindes, growing thicke and close together, either from the seede, as is declared in the former Chapter, or from the rootes of former salles, the first bring a profit begotten by him selfe, the other a right left by purchase or inheritance, and desire, as it is the dutie of euery vertuous husband, to make his best and most lawfull profit thereof, hauing not left vnto him any president of former commodity. In this case you shall suruay the whole circuit of your wood, with every corner and angle there vnto belonging, and then as your abilitie and the quantity of your ground shall afford, you shall deuide your whole wood either into twelue, scauentene, or one and twenty parts of equall Acres, Rodes, or Rods, and every yeare you shall sell or take to your owne vse one of those

The deuision of Woods.

The valew of
vnder-wood.

those parts, so that one following yearely after another, our sales may continue time out of minde, and you shall employ as you please so much wood euery yeare of either twelue, seauenteene, or one and twenty yeares growth. And in this you shal note that the sale of one and twenty, doth farre exceede that of seauenteene, and that of seauenteene as farre that of twelue: but in this it is quantity, and your necessity that must direct you, and not my demonstration: for there be selue Husbandes but know that an Acre of one and twenty yeeres growth, may be worth twenty, nay thirty pounds, that of seauenteene worth eight or ten pounds, and that of twelue, five and six pounds, according to the goodnesse of the wood, insomuch that the longer a man is able to stay, the greater sure is his profit: but fewell and fence must of necessity be had, and if a man haue but twelue acres of wood, I see not but he must be forced to take euery yeere one acre for his owne reliefe, and if hee take moze, hee must either necessarily spoyle all, or drine himselfe into extreame want in fewe yeares following: and therefore it is meete that euery good husband shape his garment according to his cloath, and onely take plenty where plenty is; yet with this husbandly caution that euer the elder your sale is, the richer it is, as you may perceiue by the well husbanded Woods of many Withopzickes in this land, which are not cut but at thirtie yeares growth.

Of the sale of
vnder-woods.

When you haue made your deuisions according to your quantity, you shall begin your sale at an out-side where cariages may enter without impeachment to the springs you intend not to cut, and a pole or halfe pole according to the quantity of ground, you shall preserve (being next of all to the outmost fence) to repaire the ring fences of your Wood, and to seporate the new sale from the standing Wood: and this amongst Woodwards is called *Blash-pole*. Then at the latter end of Januarie you may begin to cut downe your vnder-wood, and sell it either by acres, roodes, perches, poles, roddes, or dozins, according
: ding

ding to the quantitie of your earth, or the abilitie of your buyers. And in this sale I cannot set you downe any certaine price, because true iudgement, and the goodnesse of your wood must onely giue you direction, things being euer valewed according to their worth and substance, and this sale or the cutting downe of vnder-wood, you may continue from the latter end of Ianuarie, till midde Aprill, at which time the lease begins to bud forth, or somewhat longer if necessitie vrges you: the like you may also doe from the beginning of September, at which time the lease begins to shed till the middelt of November.

Now for the manner of cutting downe your vnder-woods, although the lawes of the Kingdome shew you what dutie you shall performe therein, what Timber you shall preserve, and how neere each Cleauer shall stand one to another, yet I would wish you both for your owne and the Common-wealths sake, to performe somewhat more then that to which you are by law compelled, & therefore you shall giue direction to your wood fallers, that when they shall meete with any faire and straight well growne sapling, Oake, Elm, Ash, or such like, to preserve them, and let them stand still, being of such fit distance one from another, that they may not hinder or trouble each other in their growing, and when you shall finde vpon a cluster many faire Plants or Saplings; you shall view which is the fairest of them all, and it preserve onely, and the rest cut away, that it may prosper the better: also if you finde any faire and well growne fruit Trees, as Beares, Chestnuts, Seruisses, and such like, you shall let them stand and cleare them from the droppings of the taller trees, and you shall finde the profit make you recompence. Now for the generall cutting vp of the wood, you shall cut it about six inches aboue the ground; and drawing your strokes upward, cut the wood slope-wise, for that is best to hasten on the new Spring; and those Cleauers or young which you preserve and suffer to growe still, you shall prune

How to cut
vnder woods.

and

and trimme as you passe by them, cutting away all superfluous branches, twiggcs, and young spyers, which shall grow either nere vnto the roote, or vpon any part of the boale, which is fit to be preserved for Timber, and if you shall finde that the earth haue by any casualty forsaken the root, and left it bare, which is hurtfull to the growth of the Tree, you shall lay fresh earth vnto it, and ram the same hard and fast about it.

The fencing
of salles.

The Wood-
wards duty.

Thus when you haue made an end of cutting downe your sale, and that the wood is cleansed and carried away, and all the lose and scattered stickecs raked vp into seuerall heapes, and caried away also; for it is the part of euery good husband and Woodward, not to see any wood lye and rot vpon the ground: you shall then with the vnderwood preserved in the Plash-pole, deuide by a strong hedge this new cut downe sale from the other elder growne wood, and for tenne yeeres, as before is spoken, not suffer any leure-footed beast to come within the same; from which rule you shall learne this lesson, that it is the Woodwards duty euery day to looke ouer all his young Springs, and if by any mischance or negligence cattell shall happen to breake into them (as many times they doe) then shall he not onely drive forth or impound such Cattell, but also suruay how farre and which Plants they haue cropt, and hauing spied them, with his wood Bill, presently cut the Plants so brouzed close by the bottomes of the last Butts, and then they will newly put forth againe, as well as if they had neuer bene hindred: which done, he shall finde out where the cattell brake in, and then mend the same, so well and sufficiently, that it may preuent the like mischief. Also if these young Springs shall stand nere vnto Forrests or elder Woods, which are full of wilde Deare, and be no puriewes belonging vnto the same, the Woodward then shall neuer walke without a little dogge following him, with which he shall chase such Deare out of his young Springs, because it is to be vnderstood, that the brouzing of Deare is as hurtfull to young wood, as that of any

any other cattell whatsoeuer. And thus much touching the ordering and gouernment of vnder-woods, with their sales, and the nourishing vp of greater Timber.

CHAP. III.

Of High-Woods, and their Plantation.

High Woods are those which containe onely Trees for Timber, and are not pestered or imbraced with the vnder growth of small brush wood, such as Hazels, Whitethorne, Sallowes and Poplar are; these for the most part consist of Oakes, Ash, Elme, Beech, Maple, and such like, growing so remote and seperate one from another, that although their tops and branches meete, and as it were in- folde one within another, yet at the rootes a man may walke or ride about them without trouble. These high Woods had their first beginnings from the seede, as was befoze declared, and nourisht from age to age amongst the vnder-woods, which, when men began to want foode for their breede-Cattell, and that from the super-abundance of young Woods, they found some might conveniently be spared, they forth-with in stead of cutting downe their young wood aboue the earth, began to digge it vp by the rootes, and with stubbe Axes to teare the meane sinewes from the ground, so that it might not renew or encrease againe, and then leuelling the earth, and laying it smooth and plaine, to leaue nothing standing but the tall Timber trees, betwene which the grasse had more libertie to growe, and Cattell more abundance to feede on, and all be not so long and well able to fill the mouth, as that which growes in the thicke springs, yet much more sweet and better able to nourish any thing that shall graze vpon the same, by reason that the Sunne and Frosts hauing more free power to enter into the ground, the earth is so much

What high Woods are.

The beginning of high Woods.

the better seasoned, and bringeth forth her encrease with moze sweetnesse.

The Plantati-
on of high
Woods.

Some are of opinion, that these high Woods may as well be planted as sowne, and that many of them from the first beginning haue bene so, to which opinion I consent in part: for doubtlesse I am perswaded, that many small Groues of Ash, Elme, Beech and Poplar haue bene planted, for we see in our daily experience, and the new walkes in More-fields by London, are a perfect testimonie, that such Plantations may be without trouble or danger: but for the Dake to be taken vp and replanted, is very hard, and very seldome in vse, neither shall a man in an whole Age see any Dake remoued come to perfection or goodnesse, but growe crooked, knottie, and at the best, but for the vse of felwell onely: but for the other before rehearsed, you may remoue them when they are a dozen yeares of age, and plant them where you please: and if the earth haue in it any goodnesse at all, they will take root and grow both speedily, and plentifully. And since I am thus farre entred into the plantation of Woods, I will shew you how you shall plant and remoue euery Tree in his due manner and season.

Of Planting
the Elme.

And first for the planting of the Elme, which is an excellent Tree for shadow, and the adorning of walkes or dwelling houses, you shall make choise of those Plants which are straightest, soundest, the barke even and untwound, and at least eightene or twenty inches in compass: these you shall digge out of the ground, roote and all, then at the top of the head, about three fingers vnder the knot, where the maine armes severally issue forth, you shall a little slope-wise cut the head cleane off them, and mixing clay and a little horse-dung, or fine ashes together, couer the head round about therewith, then ouer the same wrap Masse, or fine Hay, and binde it about with soft clouen Dziers, or some such like bands, then with a sharpe pruning Bill cut euery severall branch of the roote within a finger or two of the stocke: which done, and the roote

pickt

pickt cleane, you shall make a hole to be digged in the place, where you meane to plant the Elme iust of that depth, the hole was from whence you digged out the Elme, that so much and no more of the Elme may be hidden in the earth, then was formerly at his remouing; and this hole you shall make spacious and easie, and that the mould be soft and loose both vnderneath and round about the roote of the Elme, which done, you shall place your Elme in the same, straight and vp-right, without either swaruing one way or other, which for your better certaintie, you may proue either with plumbe, leuell, or other instrument, which being perfected, you shall with rich fresh mould well mixt with olde manure, couer and ram the same fast in the earth, in such sort, that no reasonable strength may moue or shake it: and all this worke must be done in the encrease of the Moone, either in the moneth of October, or at the latter end of January: but the latter end of January is euer helde the best and safest, for there is no question but you shall see flourishing Trees the next Summer after: and in this sort you may likewise remoue either Beech, Witcher, or Popler, bestowing them either in Groves, Walkes, Hedge-rows, or other places of shadow, as shall seeme best to your contentment: for their natures being alike, their growthes and flourishings haue little difference.

Now for the replanting or remouing the Ash, though not much, yet there is some difference, for it is not at the first so speedie a putter forth, and flourisher, as the others be: but for the first yeare labourerth more to bestow and fixe his roote in the earth, then to spread forth his vpper branches, and although some Wordwards are of opinion, that so much as the Ash is aboue the ground, so much hee will be vnder before he begin to flourish outwardly, yet experience doth find it erroneous, for though it be for the first yere a little slower then other Trees, yet when it beginneth to flourish, it will ouertake the speediest grower. Therefore when you do intend to plant Ashes for a speedy profit,

Of Planting
the Ash.

profit, you shall not according to the olde custome chuse the smooth, small, long Plants, which are hardly three inches in compasse, and haue put out hardly any branches, and are such as grow from the rootes of elder Althes cut downe before, which our ancient Woodwards haue vsed to slip or cleaue from those rootes, no, these are the worst sorts of Plants: but you shall take the true ground-Ash, which springeth from his owne proper roote, being smooth, euen, sound, and straight without bruise, canker, or other impediment. This you shall tryge by the roote, being as is before said almost twenty inches in compasse, and hauing cleansed the roote, you shall leaue each spray not above halfe a fote, or eight inches in length: but for the small threds or tassels of the roote, those you shall cut cleane away close by the wood, and so plant it in euery point, as was shewed you for the planting of the Elme, onely the top thereof you shall by no meanes cut off, because it is a tree of pith, which to deuise or lay bare, were very dangerous; and the best season for the planting of this Tree, is euer in the encrease of the Moone, at the fall of the leafe, which is from the beginning of October till midde Nouember, and at no other time, for it would euer haue a whole Winter to fasten his roote, and to gather strength, that it may bud forth his leafe the Summer following. Thus you see how you may plant Groues or Coples at your pleasure, and make vnto your selfe high Woods according to your owne pleasure. But you will object vnto me, that you live in such a champaine Country, that albe these Plantations might breede vnto you infinite pleasure, yet the pouerty thereof in wood is such, that these Plants are not there to be found for any money. To which I thus answer, That in this Kingdome there is not any Country so barraine, or farre off remote from wood, being a soyle fit to receiue wood: But his next neighbour Country is able to furnish him, especially with these Plants at an easie reckoning: as for example, I hold Northampton shire one of the barrenest for Wood, yet

best

Obiection.

Answer.

best able to beare wood, and hath not he his neighbour Huntington Shire and Leicester Shire about him, where nurceries of these Plants are bred and preserved for the sale onely? Nay, euen in Holland, in Lincolne Shire, which is the lowest of all Countries, and most unlikely to holde such a commodity, I haue seene as goodly Timber as in any Forrest or Chase of this Kingdome: and thus much for the planting of high Woods.

CHAP. IIII.

Of the preservation, and sale of high Woods.



It is not sufficient for the Husbandman to sow, plant, and encrease wood about his grounds, conuerting his earth to the utmost and extreamest profit that may spring from the same: but he must also be diligent to preserve and nourish his timber trees from all inconueniences that may any way annoy or afflict them: and to this end hee shall daily walke into his Woods, and with a searching eye suruay euery Tree which is of any account, and see if he can finde any fault or annoyance about the same, and if casting his eye vp to the top, where the maine armes shoute forth themselves, he perceiue that by the breaking off of some arme or other riuen boughes, the wet and droppings of the leaues is sunke and fretted into the Timber, which in time will corrupt the heart, and make the Tree hollow. In this case he shall presently mount the Tree, and with his Bill, either cut the place so smooth that the wet may not rest thereon, or else hauing smoothed it so much as he may with conuenience, mire stiffe clay and fine hay together, and with the same couer the place, in such manner, that it may put off the wet till it haue recovered new barke.

Of Trees
which take
wet inwardly.

If hee shall perceiue any of his younger Trees to be

Of Barke-
bound.

Barke bound, that is, so stiffe and straitly tied within their owne ryndes, that they cannot encrease or prosper: in this case he shall with a sharpe draweing knife, made in the proportion of a narrow C draw and open the barke euen from the top of the bole of the Tree downe to the roote, and then clap Dre-dung into those slits, let the Tree rest, and in short space you shall see it mightily encrease.

Of Hornets
and Dores.

If he shall perceiue that Hornets, Dores, or such like, haue found some little hollownesse in one of his Trees, and seeketh there to shelter and hide themselves, which in little space they will sone make larger, he shall forthwith besmeare all the place with Tarre and Goose-dung, and it will drive them thence.

Of the Can-
ker.

If he shall finde that by the droppings of other Trees, some of his Trees shall grow cankerous, and lose their barke, which is an accident very vsuall, and the Trees whose barks are so lost, will with great difficulty after prosper. In this case he shall annoynt the place with Tarre and Oyle mixt together, and then couer the place with clay, where the barke is wanting.

Of Pismyers.

If he shall perceiue any Pismyer hills or beds to be made against any of his Trees, which is very noysome, for they are great destroyers of the barks of Trees: he shall then with hot scalding water kill them, and throw the hill downe leuell and plaine with the earth.

Of Iuy, Wood-
bine, and Mis-
seltoe.

If he shall finde any Iuy, Woodbine, or Mysteltoe to grow in or about any of his principall Trees, which doe strangle, suffocate, and keepe them from encreasing, he shall forthwith digge vp the roots thereof, and then cut it away or loosen it from about the barks of the Trees.

Of Thunder
and Light-
ning.

Lastly, if he shall perceiue that by Thunder, Lightning, or other plantarie strokes, any of the armes of his well growne Trees be blasted or flaine, he shall forthwith cut them away, euen close to the quicke Wood, and make the place smooth and euen where they were topned: thus shall the carefull Husbandman with a vigilant eye, regard euery enormous and hurtfull thing that may of-
fend

send his Timber, and by that meanes possesse more benefit from a fewe Woodes, then others doe from many Acres.

Now when either necessity or the urgent occasions of any needfull use, enforceth the Husbandman to make sale of any part of his tall Wood, in which Marchandise there is many pretty and obscure secrets, such as are hard to be shewed by any Verball demonstration, for truly there is not any trucking or marting whatsoever, in which a man may sooner deceiue, or be deceiued, men buying and selling in a manner hood-winkt: for it is most certaine that no man can certainly tell either what peny-worth hee selleth, or the other buyeth, so long as the Tree is standing, there be in Trees so many secret faults, and likewise when they are downe, and come to the breaking or burking (as the Wood-man tearmes it) so many vnerpected vertues, as for mine owne part I haue often scene a Tree whose outside hath promised all good hope, the barks being smooth and even, the body large and great, and the armes high set on, and spaciously extended; yet when this Tree hath bene felled, and came to burking, there hath bene found a hole in the top, which hath runne cleane through the heart, and utterly spoyled the whole Timber: so likewise on the contrary part I haue scene a Tree very foule at the top, which is suspicious for rotnesse, whose armes haue growne so close and narrow together, that they haue promised little burthen, yet being cut downe, I haue scene that Tree passing sound, the armes double the loades in valuation, and the price being lesse then any, the proofe and goodnesse to excēde all, so that I must conclude it all together impossible to set downe any fixed or certaine rules either for the buyer or seller: but for as much as there are diuers worthe obseruances for both parts, and that it is as necessary to buy well as sell well, I will runne through euery particular obseruation, which doth belong both to the one and the other partie, with which when a mans minde is perfectly acquainted, he

Of the sale of
tall Woods.

he may with much bolder confidence aduventure to buy or sell in the open Market.

How to chuse
Timbers.

Of Mill Tim-
ber.

Timber to
beare bur-
then.

Timber for
Pales, Wain-
cote, &c.

Timber for
Pyles or Wa-
ter-woikes.

The first thing therefore that either buyer or seller should be skilfull in, is the choyse of all sorts of Timbers, and to know which is fit for euery seuerall purpose, the crooked and vneyely bring for some vles of much higher price and reckoning then that which is plaine, straight, and euen growne, as thus for example. If you would buy Timber for Mill-wheeles, the heads of round Turrets, or any kinde of any worke whatsoever, you shall chuse that which is crooked and some-what bent, bring sound, firme, and vnshaken. If you will chuse Timber for Summer Trees, Baulks, Jawnies, or Tracens, you shall chuse that which is most hartie, sound, and much twound, or as it were wythen about, which you shall with great ease perceiue by the twinding or crooked going about of the barke, the graine whereof will as it were circle and lap round about the Tree. This Timber which is thus twound or wythen, will by no meanes ryue or cleaue asunder, and therefore is esteemed the best to support and beare burthen, and the heart thereof will endure and last the longest.

If you will chuse Timber for Pales, Singles, Copers-ware, Waincote, or such like, then you shall euer chuse that which is smooth, euen, and straight growne, without any manner of twynding or shaking, which you shall perceiue by the straight and euen growing vp of the barke, whose crests will ascend straight and vpight, euen from the roote to the bottome, which is an assured token that all such Timber will shiuer and ryue into as thinne parts as a man would desire.

Lastly, if you would chuse Timber to make Pyles of, to driue into the earth, for the framing of Weares within the water, the heads of Ponds, or any other worke within the water, then you shall chuse that which is most knot-tie (so it be sound) for that will driue without splitting, and continue in the earth the longest: and of all Timbers the

the Elme is accounted the best for this purpose, for it will continue almost everlastingly in the earth without rotting; yet notwithstanding, the Oake is excellent good also: and thus much for the generall choise of Oakes.

Now if you would chuse Timber for weather-boards, or to be vsed in water-wozkes, or to make Planks for low most Vaultes, then you shall chuse the biggest, soundest and smoothest growne Elme, it is also excellent good to make Kitchen tables of, or for boards for the vse of Butchers. If you will chuse the most principallest Timber, for Cart or Waine Axel-trees, for the naues of wheeles, or for any other vse of toughnesse, you shall chuse the Elme onely, for it exceedeth all other Timbers, and though some Husbandmen are of opinion, that the Elme Axel-tree when it is thoroughly heated, is then most apt to breake, they are much deceiued, for it will endure farre beyond Ash or any other Timber, except Yewgh, which for the scarcitie is now of little vse in such a purpose. And herein you must obserue, that the Elme which you chuse for Axel-trees must be strait, smooth, and without knots, but that which you chuse for naues, must be most knotty, twound, and the hardest to be broken or hewed asunder.

Vse of the
Elme.

If you will chuse Timber for Ploughes, ordinary Axel-trees (for those of Elme are speciall) the rings of wheeles harrow bulls, and such like, then you shall chuse the fairest, straightest, biggest, and smoothest growne Ash that you can finde, and from the roote end upward, you shall cut out a length of Axel-trees, aboue it a length of sheldes, and aboue it (if the Tree be so large) a length for heads and Sheathes, the largest armes which are somewhat bending, you shall elect for rings for wheeles, and so according to the bignesse of the Ash, and as your eye can proportion out what will be made of the same, you shall make valuation thereof.

Vse of the
Ash.

If you would chuse Timber for ioyned Tables, Cup-boards, or Bedsteads, you shall then make choise of the fairest Walnut-tree you can finde, being olde, straight, vn-

Vse of the
Wall-nut
tree.

It

knotted

knotted, and of a high boale: and although either Oake, or Ash will reasonably well serue for this purpose, yet the Walnut-tree is by many degrees the best of all other, for it is of smoothest graine, and to the eye most beautifull, provided that by no means you put it into any worke, before it be exceedingly well seasoned.

Vse of the
Peare-tree.

If you would chuse Timber for Joynt-stoles, Chaires, or Chests, you shall then chuse the oldest Peare-tree so it be sound, for it is both smooth, sweet, and delicate, and though it be a very soft Wood, yet in any of these frames it is an exceeding long laster, and the heart thereof will neuer breede worme, nor will it in any time lose the colour.

Vse of the Ma-
ple, Beech, and
Poplar.

If you would chuse Timber for Trenchers, Dishes, or any Turners ware, or for any in-laying worke, you shall then make choise of the fairest and soundest Maple, being smooth and unknotted, for it is the plainest graine, and the whitest Wood of all other: and although either the Beech or Poplar will reasonably well serue for these purposes, yet is neither the colours so good, nor the Timber so long lasting. Many other Trees there are which may serue for many other purposes: but these are of most vse for our English Husbandman, and will sufficiently serue to passe through all his businesses.

Of Char-
coale.

Touching Char-coale, you shall vnderstand, that Oake, Elm, and Ash, make your longest and best enduring Coale: the Birch the finest and brightest Coale, and the Beech or Sallow the swiftest Coale. Now for your small Coale, the twiggess of the Birch makes that which kindles the soonest, and the White thorne that which endures the longest.

How to value
Timber.

Thus when you know how to chuse every seuerall Tree, and the true vse and profit which can any way be made of the same, and by a practised experience can cast by the suruay and view of a standing Wood, the almost entire profit that may arise from the same, deciding in your memory how many are for every seuerall purpose, and to what

what reckoning they may amount one with the other, and blemishing (if you buy) the good with the bad, or making good (if you sell) the bad with those good ones which grow neere them, you may then boldly venture into any sale either as buyer or seller at your pleasure, and sure if you know (as it is fit you should doe) the Market-able prices of all sorts of Timbers in those places, where you are either to buy or sell, as what a Mill-post is worth, what so many inches of well squared Timber, contayning so many foote in length, what a dozen of boards of such a size, what so many haues, speakes, rings, sparres, or frascens, or what so much sound and good Plough-timber is worth, and then looking vpon a Tree, and computing what may euery way be made of the same, allowing the wast which will hardly sometimes defray the charge of breaking vp the Tree, you cannot but with great ease draw into your minde the true value of euery Tree, and the vttermost profit or losse may any way rise from the same.

And in this worke I would haue you to obserue this rule very carefully, that is, when you come to any great Timber-tree, to fathome or embrace it about with both your armes, and then knowing what quantity your fathome is, and how many fathome girdleth the Tree round about, you may from former experiences giue a certaine gesse what inches of squared Timber that Tree will beare, for if you haue found in former trials that twice your fathome in the rough barkes hath borne twenty, or two and twenty inches squared, and now finde that the present Tree on which you looke, is no lesse, but rather with the bigger, you may boldly presume, that being sound, this tree can carrie no lesse square of good Timber: and thus much for the knowledge and choise of tall Woods.

Now to come to the seasons & fittest times for sale of these high Woods: you shall vnderstand that it is meete for euery good husband which intendeth to sell any of his high Woods, to walke into the same immediately after Christmas, & whether they be in woods, Groves, hedge-rows, or

How to measure Timber by gesse.

Best seasons for the sale.

other places, to marke with a speciall marke all those Trees which he intendeth to sell, as well for the wooeding and cleansing out of all such as are decayed and wasted, as also to know the true number of both the good and bad, and thereby in some measure to compute the profit which will arise from the same, for to make sale of them otherwise confusedly, might bring much losse to a man happily, selling away those that would encrease their balewes, and keeping them which daily would decrease their goodnesse, or so disorderly vnmixing his Wood, that where one faire and good Tree would draw a mans eye from beholding diuers which are doated, now that onely taken away, the rest will remaine, and neuer be saleable, and therefore euer as nere as you can so suite and match your Trees together, that in your sales you may neuer passe away an absolute woorthie Tree, but you may euer couple some which haue defects to goe with it, as in these dayes we see Warriners and Poulters sell Rabbets, a fat and a leane euer coupled together. When you haue thus marked out what you meane to sell, and disposed your sale according to your best profit, after notice giuen vnto the Country in the Market Townes nere adioyning, you shall begin your sale the Candlemasse following, which sale you may continue all the Spring, according to the greatnesse thereof, or the quicknesse of buyers. Now for any rules or orders to be obserued in these sales, I can prescribe you none certaine, because it is moete that euery one binde himselfe to the customes of the Country in which he liueth, whose variations are diuers, for almost euery one is seuerall, onely in the maine they holde together, which is that they selceme make publike sales for money downe vpon the head, but for a certaine payment some fewe moneths after, which makes the Marchandise more lookt to, and the sales goe away the faster: and in this the Salesman must be circumspect in the choise of his Chapmen, and where hee findeth any doubt there to make one neighbour stand bound for another: as for the earnest penny it is euer ouer
and

The time for
Chapmen.

and above the price, and must be laide downe at the binding vp of the bargaine, which earnest is in some Countreies foure pence in the pound, in some eight pence, and in some twelue pence, according to the goodnesse of the Timber, and hath euer bene taken for a fee due to the Sales-man for his paines and attendance, and sure if he be carefully honest, it is a meritt well bestowed: if otherwise, it is much too much for falsehood, for in him consists the owners losse or profit, and therefore it may become any man, of what place so euer, to take a strickt account from such an officer: or if he haue any doubt, euer to ioyne with him in commission, another of contrary faction.

When you haue made sale of your Timber, you shall by no meanes let it be cut downe till the end of Aprill, at which time the sap ascending vpward, will loosen the bark, and make it come from the body of the Tree easily. You shall cut your Timber downe close by the earth, not digge it vp by the rootes, vntlesse you meane vtterly to destroy it, for from the spurnes of the roote will arise new Spiers, which in proccesse of time, will come to another Tree. As soone as you haue felled your Dakes, you shall with your Axe immediatly whilst the sap is wet, take all the barke from the body and the armes, and setting it end-wayses vp one by another, so place it, that the winde may passe through it, and dry it, and then sell it to the Tanners, which will giue you a good price therefore, according to the worth and scarcety thereof. When your Trees are barkt, you shall then sawe the body into such lengthes of Timber, as shall be meete for the purpose for which it is bought, or in such sort as it may be best portable: the armes also you shall helue from the body, and so burken or breake them vp, as they may be fit to be loaded: all which done, and the Timber carted away, you shall if you intend to haue the Wood renewed, fence in the sale, and keepe it safe from Cattell: and thus much for the preservation and sale of high Woods.

When to cut
downe Tim-
ber.

C H A P. V.

Of the breeding of Wood in rich champaine soyles.



Nature which is the most perfect worke-ma-
ster of all things (as all the Philosophers
say) but I say our good God out of his most di-
uine wisdom, hath allotted to euery soyle, if
we will note it, through the whole course of
this Kingdome, particular profit to sustaine and maintaine
it, as to some Mines, to some Timber, and to some fertility
of grasse and cozne, and where any one of these are, there
commonly some of the other is euer wanting, as we see
daily in our experience; and for as much as in the fruitfull
and fertill soyles of this land, of which wee esteeme the
wealthie vales, as that of Ellam, White horse, Beluoire,
and many others the best, there is euer great scarcitie of
Wood, the very wealthinesse of the soyle it selfe almost
denying to beare such burden, because for the most part the
firmnesse of those clayes is contrary to their growth, yet for
as much as the necessitie and vse of Wood is so great and
valuable, I would perswade euery good and worthy Hus-
bandman, to endeauour himselfe with all his best power
and strength, to plant wood in euery convenient place round
about him, and not to take the rules of the ignorant for his
lesson, that sith neuer any did grow there, therefore neuer
any will grow there: for it is absurd and foolish: not to say
because my auncestors haue neuer done it why should I
attempt it? These arguments are made from a false fi-
gure, and the Husbandman must remember that his dutie
is industrie, and increase not altogether imitation and
president, and he must as seriously finde out new and nee-
rer profits, as hold those he hath learned: and therefore he
shall endeauour by all commendable labour to haue euer
about him whatsoever is necessarie for his vse: but you
will

will peradventure answer me, that to plant Woods in these rich soyles, were very much losse, because the fertilitye thereof will yeld a much better profit. To this I reply, that I would not haue you plant any spacious piece of ground with wood, but onely your ditches, hedges, and such wast earthes, as almost denie any other profit, and that the want of wood in those places may not discourage you, to imagine that wood will not grow there. Doe but view the cytes of euery Colone in those rich Countries, the seates of Noblemen & Gentlemens houses, and the Parks which commonly are adioyning there-vnto, and you shall hardly see any of them without the fellowship & acquaintance of some wood, which in times past hath bene planted either for defence or pleasure, and from thence collect that if wood will grow with my next neighbour, then why not with me, so long as the soyle doth not alter? But Labor vincit omnia improbus, True industrie was neuer fruitlesse. Then for the generall good both of your selfe & your neighbours, looke that you replenish all your ditches & ring fences, with good stoze of Quick-set, that is to say, all that lye high, & out of the danger of water, with White-thorne, Black-thorne, and Bzyer, and those which are low & subiect to washing, with Willowes, Sallowes, and Dyvers.

Now for as much as it is not enough to say vnto the Husbandman do this, but that I must also shew the manner of doing thereof: I will shew you briefly how to set all manner of Quick-sets, and first for the white-thorne, black-thorne, bzyer or such like, which must stand free from inundation, you shall when you enclose any piece of ground, after you haue markt out the true breadth of your dyke upon the in-side thereof, and close by the verdge of the dyke, cut with your spade a little trough, halfe a fote or thereabouts in breadth & depth, in which trough or small gutter, you shall lay the rootes of the first rowe of your Quick-sets, so as the top ends may looke vpward, & a little bend in towards the ditch, & these quick-sets you shall place within lesse then a fote one of another: then with your spade
beginning

How to set all
sorts of Quick-
set.

beginning to make your ditch, you shall with the first cleane mould, couer all the rootes close and fast, so as they will not shake nor stirre with your hand, then hauing raised the banke of your Dyke, and couered the lowest rowe of Quick-set more then halfe a fote, and broken the earth so, as it may lye close and handsome together: you shall then after the same manner lay another rowe of Quick-set ouer the first, I meane not one Quick-set directly ouer another, but the second rowe placed as it were in the midst betwene two of the first, though at least halfe a fote higher: then you shall couer that rowe like the former, and ouer it place a third, which shall stand directly opposite, and ouer the first, so that in their growth the middle rowe shall as it were grow betwene two of the lowest, and two of the highest: and then vpon this vppermost rowe lay the remainder of your earth, and make your banke perfect, and in this sort finishing one yard of the Ditch after another, you shall at length bring your labour to the end of your desire. Now in this labour you are to obserue some speciall things, as first to looke well vpon your Sets before you put them into the ground, and be sure that they be greene, young, and vntainted, then that the rootes be cleane, and no small threds or iaggies hanging about them. And lastly, that they stand vpright, and not aboue foure or five inches without the earth at the most, then shall you looke well to the making of your banke, and lay the earth so as it may not slip or fall backe into the Dyke, so as the raine may not wash away the mould, and leaue the rootes bare: but let all things be done strongly and artificially. The best seasons for this worke is the moneths of February, March, and Aprill, or September, October, and some part of Nouember: if the weather be dry aboue head. When you haue set your Quick-set, you shall make a dead hedge vpon the top of the new banke, to keepe those Cattell which are within your ground from breaking forth or hurting the Quick-set: and another small fence on the lowe verdge of the Dyke which is outward, to keepe

keepe those cattell which graze without from running into the dyke, and hurting the quick-set. Now after a spring and fall is past, you shall suruay all your quick-set and weede it cleane from all manner of filthinesse that doth choake or stifle it, and scratching the fresh mould about it giue comfort to the roote: then if you perceiue that any of your Sets be dead, you shall plucke them bp, and place new in the rowe, and if any be blasted in part, and not cleane killed, you shall cut away so much as is blasted, and let the rest remaine, you shall looke well to the Caterpillar and other wormes, which mightily deuoure Quick-sets, especially in these fat Countries, and if you finde any taint of them, destroy them as is shewed you in a former Chapter.

After your Quick-set is come to the age of thre yeres, and that the banke is settled and swarth growne thereon, you shall then within the body of your hedges plant all manner of great Trees, as Ash, Beech, Maple, and such like, and also all manner of fruit Trees, as Apples, Peares, Plums, Wardens, and such like, and in the first thre yeres be very carefull to preserve each in his true proper nature, and doe to them all the rights which is due to their growth, and in that time obserue which kinde of Trees in the generality prospereth best, and agréeth most naturally with the soyle. And of those Trees see that you flourish your grounds most plentifully, the particular manner of planting whereof is already formerly declared. And hence doth Kent and Worcester shire boast of their fruit, Windsor, Sherwood, and Hollam shire their Dakes, and other particular Countries their particular commodities.

Planting of
greater Trees.

Now for the setting of Willow, Sallow, and Driers, it is a thing so vsuall and common, that it needeth no great Art in the relation, yet because I would be loath that any omission should be taken for negligence, you shall vnderstand that in setting them you must first respect the place, which would euer be lowe and moyst, the water sometimes washing them, sometimes cooling them, and euer

Of the setting
of Willowes,
&c.

giuing them comfort. Now to speake first of the Will-
 low, it would be euer planted vpon bankes, where it may
 stand more dry then wet, for such prosper best, and en-
 dure longest, as for proofe some will continue, twelue, fif-
 teene, nay one and twentie yeeres, where as those which
 are set close by the water, will hardly endure seauen, but
 not aboue nine yeeres at the most. Touching their plant-
 ing, they be set two manner of wayes, but which is the
 best, is not yet agreed on amongst Husbandmen. The first
 is to take an Augure full as large in compasse (though
 much shorter) as that where-with you boare Pumps,
 and with it boare a hole in the earth two foote, and a halfe
 deepe, then hauing headed some of the choysest Will-
 lowes you haue, take the fairest and straightest of those
 lops, and then cutting them sloape-wise at both ends, and
 leauing no superfluous twigs cleauing there-vnto, put
 the bigger end downe very hard into the earth, and then
 with the mould which came forth, with the Augure ram-
 the earth close and hard about the Set, so as no reasona-
 ble strength may shake it. Now there be other Husbando-
 men which in stead of the Augure take onely an Daken or
 Ash stake, of the bignesse of an vsuall set, and with a Bee-
 tell driue it into the ground two foote and a halfe, and then
 by shaking and opening the earth, pull it out againe:
 then put in the Set as is before shewed, and beate and
 tread the earth close there-vnto, and there is no doubt of
 the well prospering thereof. Now for the defects which
 Husbandmen finde in thele two seuerall plantings. Some
 say, that the Augure taketh out so much earth, that the
 Set cannot but stand loose at the roote, and so wanting full
 hold of the earth, either takes not at all, or continues but
 a little space. Others say that the driuing in of the stake
 beates the earth so hard together, that it withstandeth the
 passage of the tender sprouts, & so killeth the set, but both
 are deceiued: for these are but suppositions, and experi-
 ence daily shewes vs, that these are the best and speediest
 wayes of setting of all sorts of Willows that euer any
 time

time brought forth, and I haue knowne one man set this way two hundred Sets in a day, of which not one hath failed, but all prospered. Now for your Sallows, you shall set them, and chuse the Sets in all points as you doe the Willow, onely they would be placed a little nearer the water, for they delight somewhat more in moisture, as for the Dyer it would be set like other Quick-set in the side of bankes, so as it may almost touch the water, and as your Willows or Sallows would be set a little remote one from another, as namely tenne fote asunder: so these must be set close together, and in thicke rows one against another: and these Dyer Plants you must cut from their head, being the principall spiers which grow thereon, and then cut off their tops, leauing them not aboue two fote long at the most, and of all other they are the quickest in growing.

And although Willow, Sallow, and Dyer, are in our lawes esteemed but as weeds and no Woods, yet they be so profitable, that the Husbandman can hardly misse them, the Willow and Sallow seruing for fence and fuel, to make Harrowes, Cart-saddles, & horse Bames, and the Dyers, for fish Leapes, or Weeles, for Baskets, Scuttels, Fans to winnow with, and many other things full as necessary: therefore if you haue any marish grounds that are vncultured, bogge-myres, or Islands in great rivers, let them be employed to the nourishing of these profitable weeds, and by making draynes through them to giue the water passage, you shall in small time bring them to earthes of great profit, which consideration were it rightly wayed, there would not be halfe so much wast ground as is in this Kingdome.

The vse of
Willowes, Sal-
lowes, and
Dyers.

But to my purpose, when you haue planted these Willowes, you shall after euery flood, see if the water haue driuen any of them awry, or displeast them, and immediately mend them, and set them vp straight againe. If any Cattell shall pyll or barke them, you shall pull vp such Settes, and place new in their roome.

Ordering of
the Willow.

Your Willow set would by no means be too long at the first setting, for then it will neuer beare a good head, and too short is likewise as vnprofitable, therefore it is held to be five fote aboue the earth, is a length sufficient: you may head your Willows once in three yeeres, or five at the furthest, and when you see the bodies ware hollow, you may cut them downe for the fire, and fire new Sets in their places.

Ordering of
Ozier.

The Ozier to come to his true profit and season, asketh much pruning and trimming, as namely you must keepe the stocke lowe, and neuer aboue halfe a fote aboue the earth, you must picke them cleane from Masse, and from the slime and filth, which the ouer-flow of the water will leaue vpon them: you shall prune the small spi-ers, and make them grow single one by another, and if any shote out a double stalke, you shall cut it away, you may head them euery second yeere at the fall onely, and though some head them once a yeere, yet it is not so good husbandry, nor will the Ozier be so tough or long lasting. The best seasons for the setting of the Willow, Sallow, or Ozier is, either any part of the Spring or Fall, and the best time to loppe the Willow or Sallow, is in the Spring for fence, and in the Fall for timber or seuell: but the Ozier would be cut at the fall of the leafe onely. And thus much for the breeding of Wood in the rich champaine Countries.

CHAP. VI.

Of Plashing of Hedges, and Lopping of Timber.



Having alreadie sufficiently in the former Chapter spoken of the planting of all sorts of quicksets, it is nexte now that I shew you how to order the hedges being growne and come to perfection.

perfection. Know then that if after your hedge is come to
 fire or seauen yeeres of age, you shall let it grow on with-
 out cutting or pruning, that then although it grow thicke
 at the top, yet it will decay and grow so thinne at the bot-
 tome, that not onely beasts but men may runne through
 it, and in the end it will dye and come to nothing, which
 to preuent, it shall be good once in seauen or eight yeeres
 to plash and lay all your Quick-set hedges, in which there
 is much fine Art and cunning to be vlsed. For this plash-
 ing is a halfe cutting or deuiding of the quicke growth, al-
 most to the outward barke, and then laying it orderly in
 a sloape manner, as you see a cunning hedger lay a dead
 hedge, and then with the smaller and more plyant bran-
 ches, to wreath and binde in the tops, making a fence as
 strong as a wall, for the roote which is more then halfe cut
 in sunder, putting forth new branches, which runne and
 entangle themselues amongst the olde stockes, doe so
 thicken and fortifie the hedge, that it is against the force of
 beasts impregnable.

What plashing
 is.

Now to giue you some light how you shall plash a
 hedge, though diuers Countries differ diuersly in these
 workes, yet as nere as I can I will shew you that which
 of the best Husbandmen is the best esteemed. First, for
 the time of yeere either February or October, is passing
 good, and the encrease of the Yone would likewise be ob-
 serued.

How to plash:

The time of
 yeare.

For the tooles which you shall imploy, they would
 be a very sharpe nimble Hatchet, a good Bill, and a fine
 pruning knife. Now for the worke you shall enter into
 it, first with your Bill you shall cut away all the superflu-
 ous boughes and branches which are of no vse, or hinder
 your worke, and then finding the principall stemmes which
 issue from the maine roote, you shall within a foote or lesse
 of the ground with your Hatchet, cut the same more then
 three quarters through, so as they may hang together by
 nothing but the outward barke, and some part of the out-
 ward sap, and this stroke must euer be sloape-wise and

The Toolles.

downeward : then take those mayne bodies of the Quickset, so cut, and lay them floape-wise from you, as you would lay a dead hedge, and all the branches which extend from those bodies, and would spread outwardly, you shall likewise cut as befoze said, and fould them artificially into your head, and euer within a yarde or two distance, where a pretie Plant growes straight vp, you shall onely cut off the top equall with the height of your hedge, and so let it stand as a stake, about which you shall folde and twind all your other branches. Now when you come to the top of the hedge, which would commonly not be aboue five fote high, you shall take the longest, youngest, and most plyant boughes, and cutting them as afoze-said, gently binde in the tops of all the rest, and so make your hedge strong and perfect : and herein is to be noted, that the closer and thicker you lay your hedge (so there be nothing in it superfluous) the stronger and better lasting it will be. Many vse not to binde in the tops of their plashd hedges, but onely to lay the Quickset and no more : but it is not so husbandly, neither is the hedge of any indurance : many other curiosities there be in the plashing of hedges, but this which I haue already shewed, is sufficient both for the Husbandmans benefit and vnderstanding.

The profit of
Plashing.

The profit which ariseth from this labour, is the maintenance and defence of fencing, the preserving and encrease of Quickset, and a continuance of amitie amongst neighbours, when one liues free from offending another. It yeeldeth a good Past for Swine, and with the ouerplus thereof at these times of plashings, repaireth all a mans dead hedges, and brings good store of felwell both to the Brewhouse, Kitchen, and Backhouse.

The lopping
of Timber.

Next to the plashing, is the lopping of Timber-Trees, which in those Countries which are bare and naked of wood, is of much vse, and though I cannot much commend it, because it oft marreth the bodies of Trees, yet I must allow it for necessary, because it is a needfull rate, which the Trees pay to their Planters.

This

This lopping or heading of Trees, is the cutting off of the armes and vppermost branches of Trees, and suffering the body to grow still, and it may very well be done once in eight or tenne yeeres, either at the beginning of the Spring, or at the end of the Fall, as you shall haue occasion to vse the wood, and immediately after the Moone hath new changed.

What Lopping is.

The season for Lopping.

Now for the manner of the worke, there is small curiositie to be vsed therein, if your Axe be good and sharpe, for you shall but cut off the armes and boughes, smooth and cleane without nickes, rifts, or gutters, or any thing which may receiue wet, whereby the Tree may be cankered and spoyled. Also in cutting away of the armes, you shall haue a great care rather to cut them away (if it be possible) vppward then downward, least when you cut them downward, the waight of the arme sodainly falling downe, rive and teare the barke of the body of the Tree, which is dangerous, and hath bene the spoyle of much Timber: which to preuent, you shall euer before you strike any blowe aboue, make a good large nicke vnderneath, and then after cut it downe from aboue, and so the Tree shall receiue no hurt. Also you shall obserue to cut the armes close by the body of the Tree, and neuer to desist till you haue made the place as playne and smooth as may be, for to doe the contrarie, is neyther workmanly, nor the part of any good husband. And thus much touching the slashing of Hedges, and lopping of Trees.

How you shall lop Timber.

CHAP. VII.

Of Pasture grounds, their order, profit, and generall vse.

Diuerſities and
vſe of Paſtures



Having already sufficiently entreated of errable Grounds, Gardens, Orchards, and Woods of all kinds, I thinke it most meete (as falling in his due place) here to write of Pasture grounds, which are of two kinds: the first, such Pastures as lye in wood land, mountainous, or colde climes, and are enclined to hardnesse and barrennesse, and therefore onely imploied to the breeding and bringing forth of Cattell: the other such as lye in lowe, warme, and fruitful soyles, and are most fertile and abundant in encrease, onely imploied to the fattening and feeding of Cattell.

Of barraine
Pastures.

Signes of bar-
rainnesse.

And now to speake of the first sort of Pasture, which being some-what barraine, is preferred for breeding, you shall vnderstand that it is generally dispierced ouer all this Kingdome, and particularly into euery Countrey, for according to the beanes and mixture of the earth, such is either the richnesse or pouerty of the same, and of those severall mixtures I have spoken sufficiently before in that part of this Booke, which entreateth of errable ground. Then to procede to my purpose, it is the first office of the Husbandman when he seeth and knoweth the true nature of his earth, and perceiueth from perfect iudgement that it is of very hard encrease, which as the temper and mixture of the soyle assures him, so also he shall better confirme by these fewe signes and Charracters, which I will deliuer: as first, if he see grasse slow of growth, and that no Spring will appeare before May. If in stead of Clouer grasse, Dandylion, and Honisuckle, you see your ground furnished with Penigrasse, Wents, and Burnet. If you see

see much Knot-grasse or Speare-grasse, or if you perceiue the scorching of the Sunne burne away the grasse as fast as the raine had brought it forth: or if you finde quarries of Stone nere vnto the vpper swarth of grasse; or if your ground bring forth Lyng, Bracken, Gorse, Whynnes, Worme, Bilburie, or Strawburie: or if your ground be moztish, full of quick-myers, mossie or full of blacke Flint, any of these signes make it to be most apparant that the soyle is barraine and of hard encrease.

And then as before I said it is the Husbandmans first office to prouide for the bettering and perfecting of his earth, which he shall doe in this sort. First, if he perceiue that the barrainnesse of his ground procedes from want of good Plants, as from want of Clouer-grasse, Dandylion, Honisuckle, Cowslow, and other sweet flowers, then he shall repaire into the fruitfull Countries, and there buy the hay seedes and sweepings of hay-barne-flowers, which he shall euery Spring and fall of the lease sowe, as thin as may be, vpon such Pastures, as he shall either lay for meddow, or prelerne for the latter Spring after Michaelmas. But if he respect not the goodnesse of grasse, but the abundance of grasse, as those husbands doe which liue in or about great Cities, then he shall dung those grounds which he will lay for meddow at Candlemasse; or those which he will graze or eate in the first beginning of the Spring, at Michaelmasse before, with the oldest and rottenest manure he can get, of which the best is the rotten skaddell or bottomes of Hay-stacks, or for want of it the manure of horse-stables, sweepings, and scolorings of yards and barnes, the muddie of olde ditches, or else good Dre or Cow manure, any of which will bring forth abundance of grasse.

Yet thus much I must aduertise the Husbandman, that this manuring of Pasture grounds carries with it diuers imperfections, for though it occasion abundance of grasse to growe, yet the meddow or hay which comes thereof, is so ranke, loggie, and fullsome in tast, that a beast

Bettering of
soyles.

Sowing of
good seedes.

For abundance
of grasse.

The imperfe-
ction of mea-
nure.

taketh no ioy to eate thereof, more then to holde very life and soule together. Also the grasse thus measured which you intend to graze or eate with your Cattell, is by meanes of the measure so loose at the roote, that Cattell as they bite plucke bp both the grasse, roote, and all, which being of strong & ranke sent in the mouth of a beast, maketh him loathe and cast it out againe, and so not strue to eate to be fat, but onely to maintaine life.

To helpe a
slow Spring.

Now if your Spring be slow, and late in the yeere before your grasse will appeare aboue ground, it is mete then that you enclose your ground, and not only maintaine the fences with high and thicke Quick-sets, but also with tall Timber-trees, whose shade and strength may defend many colde blasts from the earth, and adde vnto it a more naturall warmenesse then it had before, for it is onely the coldnesse of the soyle which makes the grasse long before it grow. Also in this case it is mete that you lay (as the husbandman tearmes it) all such Pasture as you intend to graze at the spring following, in Nouember before, & so not being bitten from that time till Aprill following, no doubt but your spring will be both good and forward. There be others which helpe their slow springing grounds by stocking them in the latter end of the yeere with great abundance of sheepe, who although they bite nere to the ground, and leaue little grasse behinde them, yet they so tread and measure it with their hot measure, that it will spring after it cometh to rest, much more early and faster then it was wont. So that to conclude in a word, to make a barren ground spring early, is to keepe it warme, let it haue long rest, and measure it well with Sheepe.

To help Knot-
grasse and
Spear-grasse.

If your ground be troubled with Knot-grasse or Spear-grasse, it is a signe of too much colde moisture in the earth, and in this case you shall with a great common Plough, made for such a purpose, turne bp great furrowes through your ground, and make them so descend and fall one into another, that not onely the moisture bred in the earth, but that which falls vpon the earth, may haue a swift passage
from

from the same, and so your soyle being dryned and kept dry, all those weedy kindes of grasse will some perish.

If your ground be subject to the scorching or burning of the Sunne, then you shall vnderstand that it is directly contrary to the last soyle we spake of: for as that by too much moysture is made barraine by colde, so this by too much want of moysture is made barraine with heate: wherefore the Husbandman shall in this case draw all his drynes, to bring moysture into his ground, which sometimes watering and sometimes ouer-flowing the same, will in the end bring it to a reasonable fertility, for it is a rule, that where there may be ouerflowes, there can seldom be any hurt by Sunne-burning, vnlesse that such soyles be vpon Limestone ground, or nere vnto other quarries of hard stone, which lying nere vnto the vpper swarth of the grasse, doth so burne the roote, that the vpper branches cannot prosper. In this case the bringing in of water doth rather hurt then good, wherefore your best course is partly by your owne industry, and partly by the labours of others, who are traded in such commodities, to let forth your ground to Stone-diggers or Lime-makers, who digging the quarries out of the earth, and then filling vp the emptie places with rubbish and other earth, the soyle will in short space become as fruitful as any other, for it is onely the want of taking roote; or the burning vp of the roote, which makes this kinde of earth barraine.

To helpe Sun-burning.

To helpe quarries of stone.

Now if your ground bring forth Ling, Braken, Gorse, Whinnes, or such like: you shall pare off the vpper swarth of the earth, and lay it in the Sunne to dry, in the height or heate of Sommer, and being thoroughly dried, you shall lay them in round hollow heapes one sod ouer another, then putting fire vnto them, burne them into ashes, which done, spread the ashes, like a measure, ouer all the ground, and you shall see those weeds will no more spring or grow in that ground.

To helpe Ling, Braken, &c.

If your ground be morish or full of quicke mperes,

To helpe mo-
rishnesse or
quick - nyers.

you shall then by small draynes or trenches draw away the water, and turne it into some lower ditch or current, and so bringing the ground to a stability or firmenesse, there is no doubt but fruitfulnessse, will presently follow after.

To helpe mos-
siness.

Lastly, if your ground be mossie, and bring forth in stead of grasse onely a soft fustie and unwholsome mosse, your onely best way to cure the fault, is in the Winter time to tread it much with the feete of Cattell, as by making of Hay-stacks in diuers parts of such ground, and so sodging your Cattell about the same, and so yearly alte- ring the places of your Stacks or Kees to goe ouer all your ground, & without doubt the treading of the ground will kill the mosse, and the manuring of the Cattell, and the expence of Hay-seeds vpon the ground, will soon bring the earth to much fruitfulnessse and goodnesse.

The generall
vse of barraine
grounds.

Now for the generall vse of these barraine grounds, it is to be vnderstood, that albe by the meanes before shewed, they may be helpt or bettered, yet they are but onely for bzeede or encrease of Cattell. Whether the grounds be seuerall and enclosed, or vniuersall and com- mon: whether they be Woods, Parkes, or Pastures, or Heathes, Mozes, Downes, or other wilde and vnlimit- ted places, and these grounds shall be deuided into three parts, the first and most fruitfulest lying lowest, lying nearest to the riuer or some running streame, you shall preserve for meddow, and not suffer any beast to bite vpon the same from Candlemasse, vntill the hay be taken from the ground. The second part, you shall graze or eate from Candlemasse till Lammas, which would be that which lieth most plaine and bleake, and most subiect to all wea- thers. And the third part, which is the warmest and safest, you shall graze from all-Hollantide till Candlemasse, and betwixt Lammas and all-Hollantide you shall eate vp your eedish or after-crop of your meddowes.

What Cattell
are to be bred.

Now whereas I speake generally, that these barraine grounds are for the bzeede of Cattell, yet you shall vnder-

stand

stand me particularly, as namely, what Cattell for what soyle, for euery barraine earth will not bring forth Cattell alike, as some will beare a faire Colwe or Dre, yet but a little Horse: and some will bring forth a very goodly Horse, yet but a very little horned beast, therefore you shall obserue that if your ground lye any thing lowe, or be subiect to much moysture, and so not extreamely barraine, but although the Spring be late, yet after it springeth, it yeeldeth a reasonable bit, this ground is fittest to breed Cattell vpon, as Colwe, Dre, and such like: but if it lye high and dry, if it be stonie or mountainous, haue much reflection of the Sunne: or though it be somewhat more barraine then the former earth, and in the best part of the Spring yeeld but a short, yet sweet bit, this ground is fittest to breed a faire and large horse vpon: but if it be extreamely barraine colde and moyst, stonie or mossie, so it be replenished with any good store of Underwood, then it is fit to breed small hard Pags vpon, or Geldings of a meaner size, Goates, wilde Swine, or such like. And lastly, if it be extreame barraine, colde, and dry, and altogether without any kinde of shelter, but subiect to euery blast whatsoeuer, this ground is fit onely to breed Sheepe vpon, as we see by daily experience in the seuerall parts of this Kingdome: so that to conclude, you shall beare in your memorie, that where you breed your beast, would be reasonable bit: where you breed your Horse good ayre and warmth, and where you breed your Sheepe, there much spaciousnesse of ground. And thus much briefly for the nature and vse of your barraine grounds.

Now to proceede to your fruitfull and rich grounds, whose very encrease and abundance of grasse, without any other curious relation shewes their fertility, there is little obseruation to be held in the ordering & disposing of them, for being naturally good of themselves, there needeth little Art to the maintainance of the same, onely to haue an especiall care to the fencing and safe keeping of them, to the due time of eating them with your Cattell, and to obserue

Of fertill
grounds.

a fit proportion of rest for them, in which they may grow and gather head for the maintainance of such beasts as shall feede vpon them. And to these, as an especiall rule about the rest, must be added a carefull diligence not to ouer-stocke or loade your ground with more Cattell then it may conveniently beare, for if your ground be neuer so fruitfull, if it be ouer-pressed with multitudes of Cattell, it cannot by any meanes yeld you the profit of your expectation, but returne you losse and damage.

The deuision
of rich
grounds.

These fruitfull and rich grounds would be deuided into two parts; the one pastures, or grounds for continuall feeding or nourishing of Cattell all the yere, the other meddowes, from whence you shall gather your Winters provision of Hay, for the preservation of your Cattell, which are either for labour or sale in the Market, and of these two parts I will speake seuerally.

The generall
vse of rich
grounds.

Yet before I begin to speake largely of them, it is meete you know the generall vse of these rich and fruitfull grounds, which is indeede the feeding or fattening vp of Cattell, either for food in your owne house, or for sale in the Market, to the Butcher, Drouer, or men of such like place or profession. For indeede to breede much vpon these rich grounds, is neither profitable to the Husbandman, nor is the beasts so bred, either so comely or Market-able, as those bred in the harder soyles, as we may note in our experience, if we will suruay the breeds of Cattell in Gloster-shire, Sommer-set-shire, and Lincoln-shire, which for the most part are bred vpon exceeding rich and fertile ground: yet if we take view of them, we shall finde that albe they are tall and large, yet they are of slender shape, leane-thighed, crumple-horned, and oft tender and dry skinned, which is a fault very note-worthy amongst Graziers, and indeede are nothing so evely and Market-able, as those beasts are which are bred in Yorke-shire, Darby-shire, Lancashire, and such like, all which are bred vpon hard and barrenne grounds, yet haue goodly, large, and round bodies, close trust, thicke, and well

well coupled together, faire heads, veluet skinnies, and as the Proverbe is, are so beautifull in horne and haire, that they are euery mans money, in euery Market. So that I conclude, that albe vpon the rich ground you may breede good Cattell, and it is necessary also so to doe for the maintaynance of stocke, yet the generall vse, and that which is the greatest profit to the English husbandman, is to graze and feede the same.

Now to proceede to my former purpose, touching that part of rich ground which I call Pasture, because it is onely for feeding, you shall first provide that they be very well fenced, according to the nature of the Country, either with ditch, pale, rayle, dead hedge, or quicke growth: you shall also see that they be well storied with water, that is sweet and wholesome, for putrified water breedeth many mortall and infectious diseases amongst Cattell. These Pastures must euer be your highest ground, and such as lye safest from inundations. Those Pastures which you lay or giue rest to from the beginning of Nouember, you may feede at Candlemasse following with heilding beasts, or such as are but beginning to feede, but with your fat beasts not till our Ladies day after: those Pastures which you lay or giue rest to at Candlemasse, you may very well feede at May following: those which you giue rest to at May Day, you may feede at Midsummer, for then the spring is swift and plentiful: those you lay at Midsummer, you may feede at Lammas, and those you lay at Lammas, you may feede in October, and generally all the Winter following: onely you shall obserue, that those Pastures which lye most in danger of water, or any other casualtie, be first eaten, least by too long delaying an vnseasonable time come, and so you be both prevented of your hope and profit.

Of Pastures
and ordering
them.

In the eating of your Pasture grounds, are many things to be obserued, as first for the feeding of your fat Cattell, you must by all meanes be sure that they haue full bite, which is to say, length of grasse: for cattell, whose
tongues.

Manner of feed-
ing of cattell.

tongues are the principall gatherers vp of their foode, neither can nor will bite nere vnto the ground, except it be extreame hunger which compels them, and then they take little ioy in their foode. Next you shall oft (as any fit occasion will giue you leaue) remove and shift them into fresh grounds, and not expect that they should eate your grasse downe to the bottome, but onely as it were scumme and take the vppermost and choicest part thereof, and so they will fede both swiftly and thoroughly: and for that grasse which they shall leaue behinde them, you shall eate it vp after them with your labouring or worke cattell, and lastly with your sheepe. It is very good also amongst your fat beasts euer to haue a leane horse or two: for your fat beasts taketh delight to fede with them, and sometimes to bite after them, there being as it were a kinde of sympathie or liking of each others tastes. After your grasse is fully knit, and hath receiued his whole strength, which will be at Midsommer, then you may suffer your fat beast to eate a little nearer vnto the ground till after Lammas, because there is an extraordinary sweetnesse therein, springing from the heate of the Sunnes beames onely. These few obseruations well kept, there is no doubt but your Cattell will fede well to your contentment, then when you see that they are sufficiently fed, according to the ayne of your purpose, whether it be for the vse of your household, or the vse of the Market, you shall forthwith imploy them accordingly, for it is both the losse of time and money, not to put them off by sale or otherwise, so soone as they are come to the end of your desire. For these rich grounds will sometimes make two returnes in the yeere, sometimes three, which is a great profit. And I haue heard sometimes of foure, but it is very rare, and the Cattell so returned must be very well stricken with flesh before they be put vnto feeding, but if your ground will returne leane beasts fat twice through the yeere, it is commodity sufficient.

Now because it is not sufficient to say sell or kill your
Cattell

Cattell when they are fat, except you haue the Art and skill to know the same, you shall obserue these few rules following, and they will sufficiently instruct you in the same. First, when you see your beast in the generall shape and composure of his body shew most faire and beautiful, each member being comely, and each bone covered, in such sort as a perfect shape requircth, as no eye is so stupid as cannot tell when a beast looketh well or ill-faouredly, you shall then guesse the beast to be well fed, especially when you see his huckle-bones round and not sharpe, his ribs smooth, not rough, his flanks full, his natch thick, and his cod round. This when you shall perceiue, you shall handle him, and griping him vpon the neathermost ribs, if you feele the skinned loose, and the substance soft vnder your hand, you may be well assured that the beast is very well fed outwardly, that is vpon the bones. You shall then lay your hand vpon his round huckle-bones, and if that feele, vnder your hand, soft, round and plump, you shall be assured that the beast is well fed both outwardly and inwardly, that is, both in flesh and fallow: then you shall handle him at the setting on of his taile, and if that handle bigge, thicke, full, and soft, it is a true signe that the beast is very well fed outwardly: then handle his natch-bones which are on both sides the setting on of his taile, and if they feele soft and loose, it is a signe that he is well fed, both outwardly and inwardly. Lastly, you shall handle his cod and nauell, if it be of an Ore, and the nauell onely if it be a Cowe, and if they handle thicke, round, soft, great, and plump, it is a most assured signe that the beast is very well fallowed within. And thus when any of these parts or members shall handle in contrary manner, you shall iudge of the contrary effects. And thus much touching the knowledge of a fat beast.

How to know
a fat Beast.

Now for the second part of these rich grounds, which are meddowes, they ought to be the most fruitfull and richest of all other, lying low and leuell, and being not

Of Meddowes
and their ordering.

yet not too much drencht or washt with the same: for as the moderate overflowing of waters enricheth and fertiles the soyle, so the too much soaking or long resting of the water rotteth the earth, & bringeth it to barraineesse, neither is it altogether necessary that every meddowe should lye so low that it might be overflowed, for there be some high grounds which are free from those floods which will beare meddow in very sufficient manner, & although the lower meddowes doe abound in the plenty of grasse, yet the higher grounds ever beareth the sweeter grasse, and it is a rule amongst Husbandomen, that the low meddowes do fill, but the high meddowes do feede, the low are for the Stable, but the high are for the Cratch, and that which is long will maintaine life, but that which is short will breede milke.

Preseruation
of Meddowes.

The chiefeest respect you shall haue to your meddowes, is to defend and preserue them from Moales, and such like vermine, which rote vp the earth, and destroy the sweet and tender roots of the grasse. Next, that you note in what places of the meddow the water standeth longest, & from thence, by small furrowes or dzyanes, to giue it a free passage, so that the meddow may as it were cleanse & be dry in one instant. Lastly, you shall maintaine the banks of all such ditches & other fences bordring about your meddowes in good and sufficient manner, both for keeping out of water after your meddowes begin to grow, as also for keeping Cattell from eating them in the night or other times, which is a great depriuation and losse of the profit you expect to come from them: for you shall vnderstand, that if any overflow shall come vnto your meddowes after May, it will leaue such a sandy filthinesse in the grasse, that except very moderate showers fall swiftly, and sodainly, to wash it out againe, the Hay which shall be got of that crop, will both be vnfauorle and vnwholsome, and breed in your Cattell many dangerous and mortall sicknesses.

When to lay
Meddowes.

The best times for laying of meddowes to rest, is, if the meddow lye high, as in vp-land Countries, or if the soyle be

be cold, or the springing thereof slow, at Candlemasse: but if the ground be more warme, temperate, & of some more fertility, then you may lay it at our Ladies day in March: but if the ground be most fruitful, then if you lay it at May day, it will be early enough. Also in the laying of your meddowes to rest, you shall consider the state of the ground, as whether it be eaten neere and bare, and with what Cattel, as Horse, Oxen, or Sheepe: if it haue bene eaten bare with Oxen or Horse, then you shall lay it earlier in the yeere, for it will aske a longer time to grow againe: but if it haue bene eaten with Sheepe (although they bite neere to the ground) yet you may lay it so much later, because the manure which they bestow vpon such good ground, will quickly hasten on the Spring: but if your meddowes haue not bene eaten bare, but haue a good deepe fogge vpon them still, then you may lay them the latest. Also in the laying of meddowes, you shall consider whether they be common or priuate, if they be common meddowes, and that no olde custome binde you to the contrary, you shall lay them to rest early in the yeere, that recouering a forward Spring, you may cut them so much the sooner, and so haue the better after-crop, and the longer time to eate it: but if your meddow be priuate, and at your owne particular disposing, then you shall lay it according to your owne necessitie, and the goodnes of the soyle, obseruing euer to giue it full time of growth, and not to cut it till the grasse be full ripe, for it is better to let it grow a weeke too long (so the weather be seasonable for the withering of it) then to cut it two dayes too soone, because when it is too early cut, it not onely loseth the strength and goodnesse, but also the substance and waight, and in the drying shrinketh and wasteth to nothing.

Touching the fittest time to cut or mowe your meddowes: If they be laid in a due season, it is held of all the best English husbandmen generally to be a weeke or a fortnight after Midsummer day, as namely about the translation of Thomas, which is euer the seauenteenth day of Iuly,

When to mow Meddowes.

and without question it is a very good time for all men to begin that labour, if their grounds be fruitfull and of earely growth: but in as much as diuers grounds are diuers in their growth, some being much more hastie then other some: and for as much as some meddow may as well grow too long as too little a time, as in high land Countries, where the heate and reflection of the Sunne will burne and consume away the grasse, if it be not gathered in a due season, I would therefore wish euery good Husbandman about a weeke before Midsummer, and a weeke after, to view his meddowes well, and if he see them turne lowne, if the Cock-heads turne downeward and stand not vpriight, if the Bels and other vessels of seede open and shed their seedes, if your Honisuckles haue lost their flowers, and the Penigrasse be hard, dry, and withered, then you shall truly vnderstand that your meddow is ripe and ready to be mowne, and the longer it standeth, the more it will lose of the substance, and when any of the contrary signes appeare, as when the meddow looke greene and fresh, the Cock-heads looke vpriight, the Bels are close and hard, the Honisuckles flowing and purple, and the Penigrasse soft and moyst, then is your meddow not readie to cut, nor will the Hay that is so gotten be other then soft, fuzzie, and most vnwholsome, no beast taking delight to eate of the same.

The inclinari-
on of the wea-
ther.

Now to these considerations, you shall adde a carefull obseruation of the state and inclination of the weather, and if you finde that the weather is disposed to much wet or incertaintie, then you shall forbear to mowe, because that moysture will still maintaine and hold the grasse in his perfect strength so long as it groweth: but if it be once cut downe, then the wet will soone rot and spoile it: but if you finde the weather enclined to drought and fairnesse, then you shall with all speede cut downe your Hay, for one load got and brought into the barne without raine, is worth two that hath bene waht, though but with the smallest shower. There be some Husbandmen that in
the

the mowing of their meddowes, will obserue the state of the Moone, and other planetarie conjunctions, but they are fitter for those which seeke curiositie more then profit, for mine owne part I would wish every good husband but to know truly when his crop is ripe, and then to gather it in the most constant and fairest seasons, which the rules already set downe will most amply shew him.

Now for the manner of mowing your meddowes, although the generall adrecteth in the hands of the mower, and that it is hard and impossible, in words, to expresse the Art of the action, nor is it needfull that every Husbandman be a mower, yet for those rules which the English Husbandman should know and obserue, I will in no sort omit them. You shall then know that in the mowing of your meddowes you shall mowe them smooth, plaine, and leuell, and as the Husbandman termes it, with such an even board, that a man may no more but discern the going in and coming forth of the Sythe: and this shall be done so close and neere vnto the ground, as is possible for the worke-man to get, especially if it be in publique and common meddowes, because the sway and first crop is all the maine profit you can challenge your owne: nay, you shall doe it also in your owne priuate and seuerall meddowes: for although an ignorant custome haue drawne some of our Husbandmen, to say and beleue that there is no losse in the sleight and insufficient mowing of priuate meddowes, because say they, what I loose in the Barne, my Cattell findes on the ground, yet they are much deceiued in that opinion, for what they so leaue on the ground halfe cut halfe vncut, is no good foode, neither pleasant nor saourie, but dry, hard, and bitter, and indeede no better then sower fogge, which may fill, but cannot nourish, and who then will be so simple, as not to preferre sweet Hay before such vnsaourie grasse: therefore be carefull to mowe your grasse euen, and close by the ground, for it will make the fresh grasse spring vp

The manner
how to mowe
Meddowes.

How to make
Hay.

with more ease, and be much pleasanter in taste.

Next after the mowing of your meddowes, followeth the making of your Hay, which is a labour that must be followed with great care and diligence, for it is an old saying, that dearth beginneth at the Hay-barne doore, and he that is negligent in that, can hardly be good husband in any thing else, then to shew you how you shall make your hay, you shall first understand that no one particular forme can stand for a generall rule, because Hay must be made according to the nature of the grasse, and the soyle where it groweth, some being apt to wither and make soone, as that grasse which is finest, and hath in it least wædes, others will be long in making, as that which is full of thicke, strong, and slower grasse, many wædes, bunnies, and such like hard stalkes, which are not easily dried, therefore it is the part of every good Husbandman, either by his eye and knowledge to iudge of the nature of his grasse, or else to follow the customes of the Country and soyle wherein he liueth, but the first knowledge, is the better Science. But to proceede to my purpose, I will in the natures of two sorts of grasse, the one fine, the other course, shew you the generall making of all sorts of Hay.

To make fine
Hay.

First, then for the making of your fine rich grasse into Hay, if it grow in great abundance, thicke and close, and so lieth in the swathe, you shall haue one with a Pitchfork to follow the Mowers, and to spread and throw the grasse thinne abroad, that the ayre and sunne-beames may passe through it: and this is called in most Countries tedding of Hay. The next day, after the Sunne hath taken the dewe from the ground, you shall turne that which the day before you tedded, and then if you haue any more new mowen, you shall ted it also. The next day following, as before, when the dewe is from the earth, you shall turne your Hay againe, and so letting it lye till the Sunne be at his height, begin to stir it againe, at which time if you finde it is reasonably well withered, you shall then draw it into windrowes, that is, you shall marke which way the winde

winde standeth, and the same way that it bloweth, the same way with Forks & Rakes one after another, gather in the Hay into long, great, thicke robes: then you shall make those windrowes into large Cokes, of which the biggest is ever the best, for they will defend themselves from raine, if happily any shall fall, whereas the little small Cokes lying light together, taketh in the raine like a sponge, and so makes the Hay a great deale much worse then otherwise it would be; when your Hay is thus set in safe Cokes, you shall let it rest a day or two, that it may take a little sweat therein, which will make the Hay wondrous pleasant and sweet, then when the Sunne is got vp to a pretie height, you shall open those Cokes, and after the sunne and winde hath passed through them, you may if the grasse be cleane & fine of it selfe, without ranke grasse, load it, and carrie it either into the Barne, or such other place, as you haue appointed for the receit thereof: but if it haue any ranke grasse, which you see vnwithered amongst it, then you shall make it vp againe into safe cokes, and so let it rest a day or two more before you leade it away. And thus much for the making vp of fine Hay.

Now for the making of course grasse into Hay, which you must suppose to be grasse growing, in colde, moyst, woodie, and barraine grounds, full of woodie, rough, and stumpe hearbage, long in growing, late ere it can be gathered, and therefore depriued of much of the Sunnes strength, to sweeten and wither it. This grasse as soone as it hath bene mowne and tedded, as is before said: the next day you shall make it into little grasse Cokes, as bigge as little Heale-hilles, and so hauing layne a day or better, then breake them open, and let them receiue the sunne and winde, for they will heat and sweat a little in the grasse, which makes it Hay the sooner & better: then after the Sunne hath spent all his power vpon it, you shall make it vp into little Cokes againe, putting two of the first Cokes into one, then hauing so layne another day, breake them open againe, and giue them the Sunne: then

To make
course Hay.

then make them vp againe, and put three or foure of those Cocks into one, and so let them lye another day, then breake them open as befoze, if the Sunne shine faire, and at euening make them vp againe, putting three or foure of those Cocks into one, and so euerie morning after the Sunne is vp breake them open, and at euening make them vp againe, till you finde that the Hay is sufficiently well dried, and sweateth no more in the Cocke: but in the morning when you breake it open it is dry, without steme, smoake, or vapour arising from it, which both your hand and eye may perceiue in the first stirring or mouing, and then you may at your pleasure leade it home, and house or stacke it as you shall haue occasion.

Use of Hay for
cattell to breed
or labour with.

Now for the vse of Hay, it is two-folde, that is, either for the maintainance of breeding Cattell, or Cattell for labour, or else for the feeding of Cattell for the Market, or for slaughter: for the maintainance of breeding Cattell, or the Cattell which are imployed in your Plough or other labours, whether it be draught or trauell, you shall make choise of the sweet, and well-dried Hay, which is of fresh and greene colour, well withered, sound, and perfect Hay, though it be long, loggie, and not exceeding much sweet, it matters not; for being well Armed and dried, it will serue sufficiently for those purposes: and with this Hay to mingle sometimes Wheat-straw, Rye-straw, Barly, or Oate-straw will not be amisse for heilding, or breede Cattell: but for worke-beasts, except necessitie constrain, let them haue Hay simple of it selfe, during the busie time of their worke, but when they rest, you may vse your discretion. For the times of giuing Hay or foddering to such Cattell as are in the house, the best is in the morning befoze they goe to labour, in the euening when they come from labour, presently after their drinke, and at night when you goe to bed. But for those Cattell which goe abroad, as Shæpe, heilding Beasts, and such like, to fodder them morning and euening, is out and out fully sufficient.

Now

Now for the vse of Hay for fat cattell, you shall make choyle of the fruitfullst, sweetest, finest, and shortest Hay you haue, being full of flowers, pleasant and odoriferous to smell on: and although this Hay be mixt with some roughnesse, yet it is not the worse, for though your fat beast make thereof great ozts, yet is the losse not great, for those ozts may be giuen to other heilding and hungrie cattell, which will eate them with great eagernes. This Hay would in the first gathering not be withered too soze but so stackt-up with a little hartie greenesse that it may a little mow-burne, and alter the colour to a Reddish brownnesse, but by no meanes so moyst that it may mould, rot, or putrifie, for that is fulsome and vnde, but onely alter the colour, and thereby make the smell sweeter and stronger. This Hay will entice a beast to eate, and will strengthen and inable his stomacke, and withall will breed in him such a drought or thirst, that hardly any water will quench him, and the Grazer takes it euer for an infallible signe, that when his beast drinks much he feeds fast and his fallow wonderfully increaseth. For the ordinarie times of foddering your fat cattell, if they be in the stall, and as we say, tyed up by the head, the best is in the morning befoze and after water, at noone; in the evening befoze & after water, and late in the night, when you goe to bed, but if they feede abroad, and take the benefit of Fogg and after-grasse, then to fodder them Morning, Evening, and high-noone is fully sufficient.

Here I could speake of Pease-feeding of Sheep, Swine, and other cattel, eyther at the Trough, Rake, Stacke, or such like, the seuerall manner of cratches, fashions of stals, and many other necessary rules appertaining to this mysterie; but I am against my will confined, and therefore must referre it to some other occasion, being loath to spoyle an excellent discourse, with a tale halfe tould, and imperfectly spoken: And thus much therefore of Medowes, and their seuerall vses.

*use of hay for
fat Cattle.*

CHAP. VIII.

A new method for the husbandly curing of all manner of Cattels diseases.

The reason for
this Chapter.



Of this Theame I haue written a whole (or as some will suppose many) Histories, yet doubtlesse nothing too much, the cause is so necessary and commodious: yet this I must let euery Reader vnderstand, that what I haue herein formerly done, I did for a general and vncontrollable satisfaction to the whole Kingdome, both the learned and vnlarned, and as well to satisfie the nicest and most curious opinion, as the simple and playne dealing creature: whence it came that I waded Artfully and profoundly into the uttermost secrets of this knowledge, leauing nothing vnsearcht, or vnset downe, that might any way tend to the satisfaction of any iudiciall Reader, and therefore tooke liberty to make a large progresse, without sparing any paynes, to make my worke absolutely most perfect. But now, hauing onely to doe with our honest playne English Husbandman, who eyther cannot much read, or else hath little leasure to read, at most but a little memorie to bestow vpon his readings; I haue here for his ease both of memozy, readings, and other verations, drawne him such a method for the curing of all the diseases in cattell, as was neuer yet found out by any man or Authour whatsoever: and is worthy to be preserved to all posterities for euer and euer.

Horses diseases
to be cured
with twelue
Medicines.

To beginne then first with the Horse, which is the Husbandmans principallest creature, you shal vnderstand that he hath, of my knowledge, one hundred and odde diseases, or infirmities, besides other hurts and blemishes, for all which, I haue seuerally shewed seuerall cures, as may appere by the volumes which are much too great for any Husbandman.

Husbandman to carry in his braynes, and therefore for his ease I haue drawne all those hundred and odd sickneses or sorraunces, into twelue, and will assure euery Husbandman that with these twelue medicines following, hee shall perfectly cure all the diseases in a Horse, whatsoever.

To proceede then in an orderly manner to the cures: Of inward
sicknesse.
Euery husbandman must know that all diseases in a horse are inward or outward: inward as offending the vitall parts, or outward as troubling the members: to speake then first of inward sicknesse, I will diuide it into two branches, that is, eyther it offends the heart, or the brayne: If it offend the heart, we call them, Feauers, Pel-
lowes, Anticor, consumption of lungs, Liuer, Splene, Gall or other intrais, Wormes, Fluxes, Belly-bound, and diuers other of like nature: For any or all which, you The first
Medicine.
shall first let your Horse blood in the neck-veine, and then giue him, during his sicknesse, to drinke, eyther in swete Wine or strong Ale or Beere, if Wine a pinte, if Ale or Beere a quart, two spoonfull of the powder called Diapente, made of Aristolochia root, Gentiana, Myrrhe, Eboni and Bachi lauri, of each equall quantitie, and let it be well beelued together, and doe thus euery Morning fasting, and let the Horse fast two houres after it.

If it offend the brayne we call them Appoplexies The second
Medicine.
Pallies, Stagers, Colos, Glaunder, Coughes, mourning of the thyme, Migrims, dizziness, and a world of suchlike: and the cure is to take Assafetida, and dissolving it in Vinegar dip hurds therein, and stop it hard into his eares for two Mornings together after you haue taken from him great store of blood at his neck-veine, and then giue him to drinke, during his sicknesse, euery Morning a quart of Milke, wherein the white and rough cankerous Masse of an old Dake pale hath bene sodden till the Milke grow thicke, then strayned & so giuen luke warme, and if you finde that no heauinesse or dizziness appeare in his head, then you may forbear the blood-letting, and the

Affected, but not otherwise, in any case; and thus assured, by these two medicines already declared will cure all the inward diseases in a Horse, whatsoever.

Of outward
diseases.

Now for outward diseases, they are eyther naturall or accidentall: If they be naturall, they eyther grow from the generation, or bꝛeꝛde, from whence a Horse is descended, or else from corruption of fode, or other vnwholesome keeping; If they grow from the bꝛeꝛde and generation of the Horse, we call them the Vines, Wens, Knots, or swellings about the throat: and for the cure thereof, take a peny-worth of Pepper, beaten into powder; a spoonfull of swines-grease, the iuyce of one handfull of Kew, two spoonfulls of Vineger, and mixe them together, and put this equally into both the Horses eares, and so tye them vp and shake the eares, that the medicine may sinke downe, and take good store of blond from the Horses necke veine, and temple veines, and vse this medicine two or thre mornings together.

The third
medicine.

If they proceede from corruption of fode, or any other vnwholsome keeping which corrupteth the blood, then we call them Impostumations, Byles, Botches, Fistulacs, Poremill, and such like: and the cure is, to take the loame of an old mude wall, strawes and all, but let there be no Lime amongst it, and boyle this loame with strong Vineger, till it be like a Pultus, and as hot as the Horse can abide it, apply it to the soze place, and it will not onely draw it to a head, and breake it, but also draw it, search it, and heale it.

The fourth
Medicine.

There be also other diseases which proceed from naughty fode, and the corruption of blood, and we call them Farcies, Scabs, Mangie, Scratches, Paynes, Gallanders, Sellanders, and all of such like nature; and the cure is first to slit the hard knots, or rubbe off the scarfe, and make the soze places raw: then take yellow Arsnicke beaten to powder, and mixe it well with fresh grease, and then therewith annoynt the soze places all ouer, which done, tye vp the Horses head, so as he may not knappe or bite

The fift Medi-
cine.

bite himselfe, and so let him stand an houre or two: then take strong old Rasse warme, and therewith bathe and wash the Horse all ouer, and so put him to his meat: and in this manner dresse the Horse or beast thre or foure mornings, and it will be sufficient; onely you must not fayle to take from him good stoze of bloud at his necke vaine.

Now if his diseases proceed from accidentall causes, as from wounds, Bruises, Straynes, Galles, hurts in the Eyes, excretions, or broken bones, then you shall to euery one of these take these seuerall medicines which follow: as first, if they be wounds, in what sort soeuer taken or receiued, you shall take Turpentine, Ware, and hogs-grease, of each a like quantity, and melting them together into a salve, dresse the wound therewith, and it will heale it, how great or little soeuer.

The sixt Medicine.

If they be bruises, whether gotten by stroke, naughty Saddles, or other rushes, from whence proceedeth many times old, putrefied & most rankorons blcers, you shall first if the tumor be onely swelled and not broken, apply vnto it the fourth medicine of Loame and Uingar, but if it be an open old rankorons blcer, you shall take Hogs-grease, Turpentine, Ware, and Merdigrease, of each a like quantitie, and being well mirt, and incorpozated together, dresse the soze therewith, till it be whole, for this medicine will abate and keepe downe any spungie or naughtie dead flesh which arises and keepes the soze from healing, and may therefore alwayes be vsed in such like cases, whether the soze be new or old.

The seuenth Medicine.

If they be straynes eyther of ioynts or sinewes, in what part or member soeuer it be, old or new, take strong Vinegar, Patch-grease, and Wheat-branne, and boyle them together till they be thick like a Pultus, and then apply it very hot to the strayne, Morning and Euening, and it is a most certayne cure, and will keepe the member from growing foule, knotted, or gourdied, and will also take away all swellings or paynes of the limbes whatsoeuer.

The eight Medicines.

The ninth
Medicine.

If they be Gallies, of what kinde or nature soeuer, whether on the backe, limbes, or any other outward part of the bodie, you shal take first fresh Butter scalding hot, and with it first bathe and wash the soze, then take thicke Cream, & mixing it with the Sote of a Chimney till it be thicke, like a salve, with the same annoynt the soze place Morning and Evening, and it will cure it without any feare of dead flesh: if you doe strow vpon the soze the powder of Rosen it will be good also.

The tenth
Medicine.

If they be any hurts in the eyes, as strokes, inflammations, Pinne-webbe, Canker, or any other mischiefe whatsoeuer, you shall then take true ground-Zuie, which otherwise is called of some Ale-howe, and beating a good handfull thereof in a mortar, with a spoonefull or two of white Rosewater, or the water of Eye-bright, then strain it through a cleane wet cloath, and with that water dresse the soze eye Morning and Evening: or if you can conveniently thre or foure times a day, for the oftner is the better, and it will without all fayle cure any soze eye in the world whatsoeuer, eyther of man or beast, or any other creature.

The eleuenth
Medicine.

If they be excrescences of bones, as Splents, Spauens, Curbs, Ringbones, or such like, in what part or member soeuer they be, you shall then take white Arsnicke, beaten or ground to fine powder, and making a little slit vpon the head of the excrescence, the length of a Barly corne, or very little more, yet in any waies downe deepe to the excrescence, & then with the point of your knife put the Arsnicke vpon the excrescence, and so let the Horse stand with his head tied vp for two houres at least for in that time the greatest anguish will be gone, and then put him vnto his meate, and in thre or foure dayes after the excrescence will fall away of it selfe; and then with a little Sweet Butter you may cure the soze, which will not be great.

The twelfth
Medicine.

If they be broken bones, or bones out of ioynt, you shall after you haue placed them in their due place, first annoynt them with the Oyle of Mallowes, or for want of it with warme

warne Hatch-grease, and then clay about them a plaster made of Pitch, Kessen, and Batticke, and so with soft and flit splents, so splent the member, as it may not moue, and so let it rest nine dayes ere you vresse it againe, and in any case so sling the Horse or Beast that he may not during that time, put his member to the ground, which a little diligence and payne will easily doe.

If your Horse haue any infirmitie in his hooes as quiter-bone, ouer-reach, pricke, crowne scabbe, rotten frush, or any such vicerous discale, you shall first lay it open, and then heale it with the seuenth Medicine. But if it be foundring, fretteshing, or such like, then you shall first pare all his hooes cleane ouer, so thinne that you may discerne the quicke all ouer, then let him bloud at the tocs, and take great store of bloud from him, but in any case cut not the veine in sunder: then take the sixt medicine, and bring boyling hot (after hollow shooes haue bene tackt on his fete) with flaxe hurds dypt therein, stoppe all the soales of his fete vp hard, and thus doe twice in sixe dayes, and it will bring his fete to their full perfection againe, without any great losse or trouble.

Diseases in the fete.

As for the common infirmities in a Horses priuy parts, which are swellings, inflammations, incozding, & such like, you shall but only swimme your horse in cold water Morning and Euening, and it is a present helpe, both for them, or the stifling of a horse in his hinder toynt: Thus you see these twelue medicines will sufficiently cure all the diseases in Horse or Beast whatsoeuer, which who so will not carry in his memory, he is worthy now and then to be punished for his sloath, and sometimes to suffer losse, which may make him more industrious to studie for his owne good and profit. And thus much for the cure of diseases.

Diseases in the priue parts, or for stifling.

F I N I S.

